

Strengthening Protections Against Trafficking in Persons in Federal and Corporate Supply Chains



This report was made possible through support provided by the United States Department of State, under the terms of Award No. S-SJTIP-13-CA-1029. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the United States Department of State.

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Analyses of the following commodities are forthcoming:

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|---|----------------------------|
| • Aluminum | • Leather |
| • Bamboo | • Meat Processing |
| • Bananas | • Melons |
| • Beans (green, soy, yellow) and Pulses (legumes) | • Nuts |
| • Brass | • Palm Oil |
| • Bricks | • Pineapple |
| • Cattle | • Rare Earth Metals (REMs) |
| • Charcoal | • Rice |
| • Citrus | • Rubber |
| • Coal | • Salt |
| • Cocoa | • Shrimp |
| • Coffee | • Silk |
| • Coltan, Tungsten & Tin | • Silver |
| • Copper | • Steel |
| • Corn | • Strawberries |
| • Cotton | • Sugar |
| • Diamonds | • Sunflowers |
| • Fish | • Tea |
| • Flowers | • Titanium |
| • Gold | • Tobacco |
| • Granite and Other Stone | • Tomatoes |
| • Gravel and Crushed Stone | • Wheat |
| • Jewels | • Wool |
| • Lead | • Zinc |

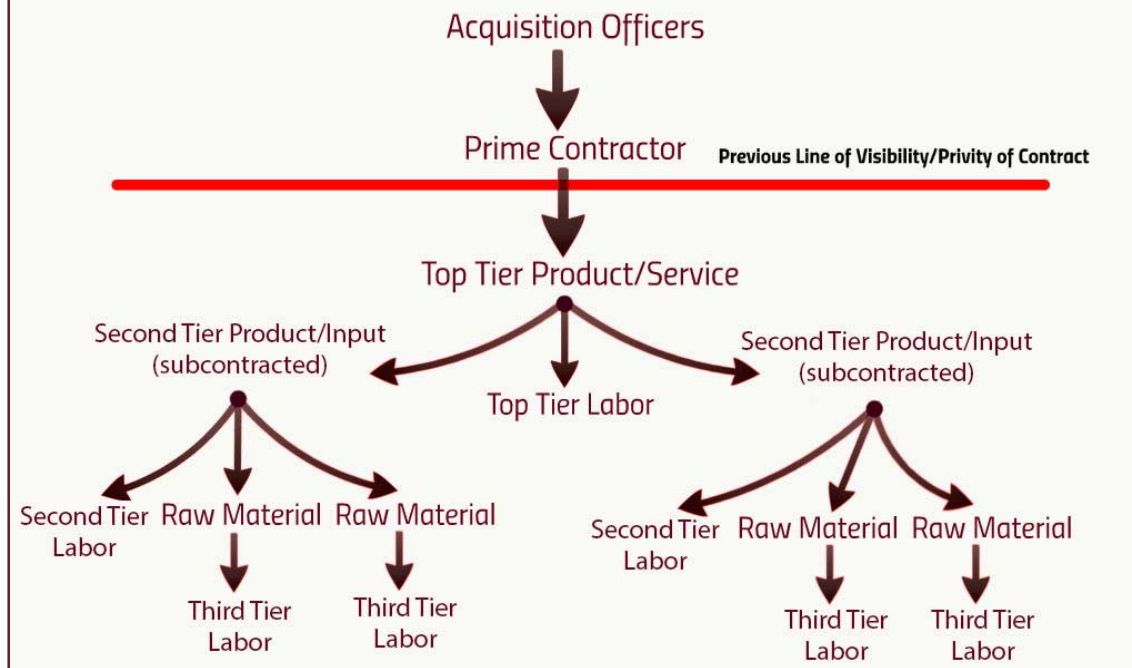
I. Introduction and Project Background

More than twenty million men, women and children around the world are currently believed to be victims of human trafficking, a global criminal industry estimated to be worth \$150.2 billion annually.¹ As defined in the US Department of State's *2014 Trafficking in Persons Report (TIP Report)*, the terms "trafficking in persons" and "human trafficking" refer broadly to "the act of recruiting, harboring, transporting, providing, or obtaining a person for compelled labor or commercial sex acts through the use of force, fraud, or coercion," irrespective of whether the person has been moved from one location to another.² Trafficking in persons includes practices such as coerced sex work by adults or children, forced labor, bonded labor or debt bondage, involuntary domestic servitude, forced child labor, and the recruitment and use of child soldiers.³ Many different factors indicate that an individual may be in a situation of trafficking. Among the most clear-cut indicators are the experience of coercive or deceptive recruitment, restricted freedom of movement, retention of identity documents by employers, withholding of wages, debt bondage, abusive working and living conditions, forced overtime, isolation, and physical or sexual violence.⁴

The United States Government is broadly committed to combating trafficking in persons, as guided by the Trafficking Victims Protection Act (TVPA) of 2000,¹ and the UN Palermo Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention Against Transnational Organized Crime. In September 2012, the United States took an unprecedented step in the fight against human trafficking with the release of a presidential executive order (EO) entitled "Strengthening Protections Against Trafficking in Persons in Federal Contracts." In issuing this EO, the White House acknowledged that "as the largest single purchaser of goods and services in the world, the US Government has a responsibility to combat human trafficking at home and abroad, and to ensure American tax dollars do not contribute to this affront to human dignity."⁵ The EO prohibits human trafficking activities not just by federal prime contractors, but also by their employees, subcontractors, and subcontractor employees. Subsequent amendments to the Federal Acquisition Regulation (FAR) and the Defense Acquisition Regulations System (DFARS) in the wake of the EO will affect a broad range of federal contracts, and will require scrutiny by prime contractors of subcontractor labor practices to a degree that has not previously been commonplace. Top level contractors will now need to look actively at the labor practices of their subcontractors and suppliers, and to consider the labor involved in production of inputs even at the lowest tiers of their supply chains.

¹ As amended and reauthorized in the Trafficking Victims Protection Reauthorization Acts of 2003, 2005, 2008, and 2013

Shedding Light on Human Trafficking Risk in Federal Supply Chains



The EO additionally requires prime contractors providing large overseas contracts to develop and maintain detailed anti-trafficking compliance programs and provide annual certification of their anti-trafficking efforts.

To assist United States Government agencies and the federal contracting community to prepare for implementation of the EO and new FAR rules, the United States Department of State's Office to Monitor and Combat Trafficking in Persons (DOS/J/TIP) asked Verité to investigate and map out the risk of trafficking in global supply chains generally, and in federal supply chains in particular. As part of this initiative, Verité has collected comprehensive data about global industries with a significant history or current evidence of human trafficking or trafficking-related activity, and has analyzed the overlap between global supply chains deemed to be at risk for human trafficking and patterns of United States federal procurement. The results of Verité's research are presented below. Detailed sector and country-specific findings will also be fed into an interactive, web-based resource for use by companies, acquisitions officers, contractors, NGOs, and consumers as they evaluate the risk of human trafficking in their supply chains.

This report is not intended to provide specific guidance on EO compliance, but it does provide the framework and resources necessary to understand the risk of human trafficking in global supply chains, and can help readers begin to assess the risk of human trafficking in particular federal supply chains. There is no way for any consumer or employer to anticipate all instances of human trafficking, but supply chain risk analysis can narrow down where to look to identify and mitigate the risks associated with the problem as much as possible.

The following section provides an overview of the main factors that contribute to the risk of human trafficking in global supply chains. Later sections examine eleven economic sectors found to be at particularly high risk for trafficking. Sections to be released in the future will analyze the supply chains and risks of trafficking for forty-eight of the world's most important commodities. Data on variables relevant to trafficking risk in specific countries (information on market activity, migration patterns, human rights indicators, socio-political factors, etc.) has also been collected in spreadsheet form, and will be developed further in the coming months in the course of creating the web-based risk assessment tool. For more information on this ongoing country-specific supply chain research, please contact Verité.

¹ United Nations International Labor Office (ILO). *Profits and Poverty: the Economics of Forced Labor*. 2014. <http://www.ilo.org/global/topics/forced-labour/publications/profits-of-forced-labour-2014/lang--en/index.htm>

² US Department of State. *2014 Trafficking in Persons Report*. June 2014. http://www.state.gov/j/tip/rls/tiprpt/2014/?utm_source=NEW+RESOURCE%3A+Trafficking+in+Persons+Report+2014&utm_campaign=2014.07.16+NEW+RESOURCE%3A+Trafficking+in+Persons+Report+2014+&utm_medium=email

³ US Department of State. *2014 Trafficking in Persons Report*. June 2014. http://www.state.gov/j/tip/rls/tiprpt/2014/?utm_source=NEW+RESOURCE%3A+Trafficking+in+Persons+Report+2014&utm_campaign=2014.07.16+NEW+RESOURCE%3A+Trafficking+in+Persons+Report+2014+&utm_medium=email

⁴ International Labour Office. *ILO Indicators of Forced Labour*. Special Action Programme to Combat Forced Labour. http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_203832.pdf; also ILO 2012. *Hard to see, harder to count - Survey guidelines to estimate forced labour of adults and children*. http://www.ilo.org/sapfl/Informationresources/ILOPublications/WCMS_182096/lang--en/index.htm

⁵ Office of the Press Secretary, The White House. "Fact Sheet: Executive Order Strengthening Protections Against Trafficking in Persons in Federal Contracts." September 25, 2012. <http://www.whitehouse.gov/the-press-office/2012/09/25/fact-sheet-executive-order-strengthening-protections-against-trafficking>

II. Risk Factors for Human Trafficking in Global Supply Chains

A variety of factors contribute to risk of human trafficking in global supply chains. Some risk factors derive from the characteristics of specific economic sectors, reflecting the types of products and industries involved, typical sourcing patterns, types of labor involved in production or supply of the product, and the nature of the workforce in question. Other risk factors derive from conditions within particular, geographically-specific supply chains. Some of these reflect circumstances in the country in which production or service delivery takes place; others reflect conditions in the country supplying the labor (which may or may not be the same as the country of production/service delivery). This overview begins with a discussion of the risk factors associated with specific economic sectors, and then provides a framework for assessing trafficking risks that are associated with particular, geographically-located supply chains, looking both at risks associated with the country of production and/or service delivery, and at the country supplying the labor in question.

Types of Risk Factors for Human Trafficking in Global Supply Chains

- Risk Factors Associated with Specific Sectors
- Risk Factors Associated with Specific Supply Chains
 - *Risks Associated with Country of Production or Service Delivery*
 - *Risks Associated with Country Supplying the Labor*

A. Sector-Specific Risk Factors

1. Risks Deriving from the Characteristics of the Product or Industry

Low-skilled labor and dirty, dangerous, or difficult work: In general, industries that rely heavily on inputs of low-skilled labor are at risk of trafficking in persons. This is particularly true for industries in which low-skilled labor is used to carry out work that is unpleasant, dangerous, or otherwise difficult. Such jobs are often referred to as “3D” jobs, for “dirty, dangerous, and difficult.” Examples of such jobs include those involving dangerous or physically arduous manual labor (mining, farm work, construction), work involving prolonged periods of repetitive motion (factory assembly jobs, meatpacking), and work that is stigmatized or socially devalued (janitorial work, personal care provision). As these jobs are undesirable and low-paying, in many cases they are performed by individuals with a high level of vulnerability, including immigrants, minorities, and other socially marginalized groups.⁶ Recent reports from Japan, for example, have described the trafficking by recruiters linked to organized crime of homeless people forced to do environmental clean-up in the wake of the Fukushima nuclear disaster.⁷ While human trafficking does occur in other kinds of industries, those that rely centrally on 3D jobs are inherently at risk.

Seasonal or short product lifecycles: Industries that are characterized by sharp seasonal or product life-cycle fluctuations in labor demand are also at risk. The time-sensitive nature of harvest cycles for many agricultural crops, for example, can lead to a temporary surge in the need for farm workers in a particular region, only to have the demand for them drop off sharply once the harvest is complete. A

similar situation can arise for low-skilled electronics workers when a new cellphone or other top-selling technology is released, as factories staff up quickly to meet the spike in demand, sometimes laying off workers again soon after orders have dropped off. The need for a large number of workers for short periods of time leads many employers to turn to labor brokers for assistance with recruitment, a practice which Verité research has shown drastically increases the risk of human trafficking.⁸ Even workers who have not been trafficked initially may find themselves vulnerable to such exploitation once the demand for their labor has receded, due to the burden of debt they incurred in the course of their recruitment, or simply because they lack the resources to return home or seek other alternatives. In addition, employers in industries with sharp spikes in labor demand sometimes seek to intensify production by temporarily increasing pressure on their existing workforce through the use of compulsory overtime or other forced labor practices.

Highly competitive industries with low barriers to entry: In general, industries that are highly competitive, with continual downward pressure on prices, may be at risk of trafficking. This is particularly true if costs for inputs other than labor have already been cut as much as possible, leading to strong pressure to reduce labor costs as a main strategy to increase competitiveness. For example, in United States garment manufacturing, where brands have a great deal of leverage over their supplier factories, and labor costs comprise the bulk of input costs, many sewing contractors' only option to retain contracts and become profitable is to pay sub-minimum wages.⁹ Related, trafficking risk is also present in industries with relatively low barriers to entry, making it possible for companies to shift production to new locations in search of lower labor costs. Low wages do not in themselves equate to labor trafficking, of course, but a "race to the bottom" in wages and prices paid to small producers may be associated with increased vulnerability to human trafficking through debt bondage, forced overtime, or other related consequences of low pay to workers and suppliers.

2. Risks Related to Business Processes Involved in Production and/or Supply of the Product

Offshore manufacturing: Industries that rely heavily on overseas production in countries with lower labor standards or limited enforcement capacity are at risk of human trafficking in their supply chains, when offshore production is associated with reduced labor costs and less stringent regulatory environments. Substandard wages for workers and reduced standards for workers' rights and workplace practices increase the likelihood of worker vulnerability to trafficking.

Reliance on labor recruiting: Industries that rely on labor recruiters or other third-party intermediaries to recruit, hire and/or manage their workforce are at increased risk of having trafficking in their supply chains.¹⁰ Labor intermediaries often provide valuable recruitment and migration facilitation services, but there can be significant gaps in regulation, and exploitation and abuse of workers are widespread. Some workers are misinformed or even deceived as to the nature and/or conditions of the job they are ultimately placed in, and many pay substantial fees to cover their recruitment costs. The debt that often results from payment of recruitment fees is a major contributing factor to the vulnerability of workers to human trafficking, as workers are forced to continue working sometimes for a year or more in order to pay off the debt they incurred to get their jobs. Indebted workers have few options and little leverage to advocate for themselves in the workplace, making them vulnerable to other elements of human trafficking as well. Vulnerability is particularly elevated when workers experience multiple dependencies on their brokers or employment agents for their wages, visas, work permits, and/or housing.¹¹

Recruitment Industry

Globalization has created longer and more complex supply chains, which require greater coordination and expertise. As these supply chains generally span across multiple countries and employ workers from a variety of different places, companies are more often than not turning to labor brokers – variously referred to as labor intermediaries, middlemen, recruiters, and recruitment agents, among other terms – to handle the recruitment, hiring, and/or management of workers.

Labor brokers—middlemen in the recruitment, hiring and/or management of laborers – operate at the core of the global economy. Labor brokerages vary in their scale and levels of formality. In some cases they are large, well-organized companies. In others they are extremely informal operations run by one individual. The services they provide also differ. Many labor brokers take responsibility for visas, medical checkups, travel arrangements, pre-departure orientation and trainings, and even contract negotiation. Some brokers actually manage the migrant contract workers at the job sites. Regardless of the level of formality or involvement in the recruitment, hiring, and management process, the presence of labor brokers increases the risk of human trafficking.

Labor brokers often promise workers high salaries and excellent conditions of work. Labor brokers often charge workers recruitment fees—sometimes legal, sometimes illegal. Fees can cover a variety of costs, including travel, passport and visa processing, and medical exams. They may also include unspecified service charges, which may go directly to the agent. Migrants often encounter more than one labor brokers in the course of migration – one in their country of origin or the sending country and one in the receiving country – and must pay service fees to each intermediary. When migrant workers are required to pay excessive fees as a condition of obtaining employment, they often go into debt to come up with the money, wagering that they will easily be able to repay the debt with the high wages they have been promised. Sometimes, family members and neighbors invest in the recruitment fee as well. Failure to repay can have severe personal and social consequences, particularly if the money is owed to those with connections to criminal elements, or if family assets have been leveraged as collateral. The existence of the debt—and the worker’s urgent need to repay it—mean that the worker may be more easily manipulated by the employer to accept lower wages than were promised, poor working conditions, excessive work hours, or similar abusive practices. Debt-burdened migrant workers are also much more vulnerable to threats of deportation—and consequent loss of their earning potential – than workers with no debt obligations.¹²

Conditions once the worker is on site can exacerbate vulnerability to human trafficking. Worker debt may be compounded by high interest rates and salary deductions, making repayment even more difficult. In some cases, workers may face contract substitution, which occurs when workers agree to one set of payment terms and working conditions, but find themselves presented with substantially different and inferior terms after they have taken on significant debt, or even after they have arrived at the worksite.¹³ The combination of debt, deception in recruitment and coercion at the worksite can create conditions of trafficking.¹⁴

In some cases, worker identification documents and passports are withheld by brokers or employers. The retention – or confiscation – of workers’ identity documents typically affects international migrants, but can also involve vulnerable workers within their own countries, for example when the provision of state social services is made contingent on workers’ possession of identity documents. Loss of control over personal documents can result in restrictions on workers’ freedom of movement, and be used as a means to bind them to a particular job or employer, forcing them to do work that they may not have consented to for fear of losing their documents permanently. Workers who flee exploitative work arrangements without

their documents become undocumented workers, without access to protection or services, vulnerable to arrest or deportation, and in many cases to even more abuse by their employers.¹⁵

Example of a Trafficking Scenario Involving Recruitment-Related Vulnerability:



Long, complex, or non-transparent supply chains: Industries with long, complex, or non-transparent supply chains are more likely to be at risk for human trafficking than ones with short, straightforward supply chains. In part this is because longer supply chains involve more contexts in which labor takes place, and hence more possibilities for trafficking to occur. The length and complexity of supply chains also contributes to risk, however, by masking transparency about embedded labor practices, making it difficult for the eventual purchasers of finished goods or services to monitor for human trafficking lower down in their supply chains. Even for consumer-facing companies or individual consumers concerned about human trafficking, lengthy and complex supply chains often make it difficult to perceive abuses that may be taking place at the level of secondary or tertiary inputs to finished products. A number of different business practices contribute to the complexity and non-transparency of supply chains. Offshoring of production is one obvious factor; overseas sourcing of inputs such as raw materials and labor is another. In addition, supply chains are often opaque in industries that rely heavily on subcontractors, and in ones that are characterized by a high degree of informality in contracting at lower tiers in the supply chain, for example when a subcontractor relies on a verbal agreement with an independent supplier in an effort to minimize regulation or taxation.

Lack of participation in multi-stakeholder CSR initiatives: While not itself causal of increased trafficking risk, the absence of industry-level corporate social responsibility (CSR) initiatives to protect workers from trafficking may be a red flag that labor issues are not closely scrutinized in that sector.

3. Risks Related to the Characteristics of the Workforce Involved

Poor, vulnerable, low-skilled workers: Industries that employ a high proportion of workers who are impoverished, lacking in professional or advanced technical skills, and landless or otherwise

dispossessed are inherently at greater risk of human trafficking. Poor, vulnerable, low-skilled workers are easily replaced by others like them, and hence have little leverage with which to advocate for their rights in the face of recruiters or employers seeking to profit from their labor illegally.

Migrant workers: Industries that rely heavily on migrant labor are often also at risk. Verité has found migrant workers, both internal and international migrants, to be vulnerable to human trafficking in a wide variety of sectors and countries.¹⁶ As a recent report by the Special Rapporteur on the Human Rights of Migrants for the United Nations Human Rights Council notes:

“migrants are at heightened risk of exploitation and abuse in the workplace, due to (a) deceptive recruitment practices, both by employers and intermediaries; (b) frequent lack of social support systems; (c) unfamiliarity with the local culture, language, their rights at work and national labour and migration laws in the country of employment; (d) limited or denied access to legal and administrative systems; (e) dependence on the job and employer due to migration-related debt, legal status, or employers restricting their freedom to leave the workplace; and (f) reliance by family members on remittances sent back home by the migrant. These factors are amplified by the discrimination and xenophobia that migrants are increasingly facing everywhere.”¹⁷

Migrants are also often restricted from forming or joining trade unions. Industries employing large numbers of migrants are likely to rely on recruiters or other middlemen, which carries risks of human trafficking, as discussed above.

B. Risk Factors Associated with Particular Supply Chains

1. Risks Related to the Country of Production and/or Service Delivery

Note: The risk factors discussed in this section refer specifically to the country in which goods are produced or services delivered, regardless of whether the worker population in question comes from that country (as is the case for industries relying on a local or national workforce), or from overseas (as with industries dependent on migrants). Risk factors that pertain to the country supplying the labor are discussed in the next section.

a) Political Risk Factors in the Country of Production

Weak legal protection for civil liberties and workers' rights: Supply chains that source goods or services from countries with weak legal protections for civil liberties and workers' rights are at risk for human trafficking. When safeguards for civil liberties such as freedoms of assembly, association, and expression are weak, civil society organizations are less able to monitor government and private sector actors and hold them accountable for unethical labor practices. Lack of formal protection for workers' rights leaves workers with little legal recourse in the face of workplace abuses, and also undermines the potential for labor organizing, reducing the ability of workers' to advocate for themselves in the face of exploitation and abuse. The impacts of such factors on human trafficking risk are exacerbated even further in countries where basic liberties are actively suppressed by repressive state regimes. Risk is also heightened in countries that protect workers' rights for their own citizens, but fail to extend protections to foreign migrants or undocumented foreign migrants, particularly when such migrants make up a significant proportion of the low-wage workforce.¹⁸

Widespread corruption: A high degree of corruption is also associated with a risk of human trafficking. General disregard for the rule of law and lack of adherence to laws by government officials opens the door to trafficking of workers in many ways. Officials may be paid bribes to look the other way when faced with practices associated with human trafficking, such as the

retention of migrant workers' passports by employers, compulsory payment of "runaway insurance" fees by workers, or illegally high deductions from workers wages. Labor brokers may also bribe government officials in order to gain access to work permits or factory placements, passing along the cost of kick-back "commissions" to workers who are already being charged high recruitment fees, in this way contributing to vulnerability to debt bondage.¹⁹ In some cases, government officials may themselves own recruitment agencies or have a vested interest in them through familial or other personal ties.

High level of crime and violence: Workers in countries with a high level of crime and violence are also at risk for trafficking. In particular, the presence of organized crime syndicates is often directly related, as crime rings trafficking in guns, drugs, or other illicit goods may also deal in human beings, facilitating delivery of workers to factories, farms, brothels, mines, or other sites of production. Countries in which organized crime flourishes often also have a high level of general lawlessness and corruption, both of which contribute to trafficking risk in their own right, both because workers may be fearful of leaving their jobs before paying off their debt or completing their contracts, and because they may be unlikely to file complaints with authorities who are perceived to be corrupt.²⁰ More informally, the simple presence of gangs or street thugs in areas where workers live and work can significantly limit the freedom of movement of workers who may be far from home, increasing their dependence on their employers and limiting their ability to seek out resources that could help them resist unethical or abusive employment arrangements.

State persecution: Countries in which some categories of workers – stateless individuals or undocumented migrants, for example – are actively persecuted by the state are also at risk of trafficking, since fear of government surveillance, detention, or deportation can act as a serious constraint on workers' freedoms of movement and association, and consequently, on their ability to resist or advocate for themselves in the face of illegal labor exploitation.²¹

Political instability or conflict: Supply chains that rely on goods or services provided in countries experiencing political conflict or instability may be at risk due to a general destabilization of society and diminution in the rule of law. Such instability also increases the risk of the local population to being trafficked, a connection discussed below in the section on factors affecting trafficking risk in labor source countries. There are also cases in which certain areas of a country may be outside of government control, leading to an increased risk of trafficking in these regions.²² In some cases, organized crime syndicates or armed groups may rely on human trafficking as a means of financing the conflict or intimidating certain populations.²³ Countries that are active theaters of war or other sites of emergent situations may also require rapid staffing of jobs in construction, housekeeping, security or other low-skilled fields, potentially leading to increased trafficking risk.

b) Socio-Economic Risk Factors in the Country of Production

Level of national economic development: The implications of overall economic development for risk of trafficking in a country vary. In some cases, relatively high GDP per capita and education levels may be associated with supply chain risk, due to the unwillingness of a relatively prosperous and skilled local workforce to do low-paid, unpleasant jobs. In such contexts, migrants and the poorest members of the society are typically relied upon to do such work, people who are structurally at risk of being trafficked due to their general vulnerability, and, in the case of migrants, to their dependence on the international recruitment industry and associated trafficking vulnerabilities.²⁴ Trafficking risk may also correlate with widespread poverty and low levels of social protection in a country, however, particularly if the worker population for "3D" jobs is sourced domestically. Relative degrees of poverty between countries also play a role, for

example, when workers from a poor country decide to migrate to a somewhat less poor neighboring country in search of regional economic opportunities.

High degree of gender inequality: Supply chains that source goods or services from countries with a high degree of gender inequality are at risk of human trafficking. In such contexts, women workers may find themselves subject to discrimination and harassment in the workplace in ways that their male counterparts are not, and this may undermine their capacity to resist or advocate for themselves in the face of employers seeking to exploit their labor illegally. Women may also be paid lower wages than men in such contexts, increasing the burden of recruitment debt for them, and consequently also their chances of experiencing debt bondage and multiple dependency on their employers. A recent ILO study of the economics of labor trafficking found that female-headed households are generally at greater risk of trafficking than male-headed ones, and that trafficking is more frequent in the unskilled occupations and informal sectors in which female workers often concentrate in gender-unequal societies.²⁵ The same study found that a high level of maternal education (indicating a greater degree of gender equality) was strongly inversely correlated with risk of human trafficking.²⁶

Use of “Export Processing Zones” (EPZs; also referred to as Free Trade Zones, Free Industrial Zones, Special Economic Zones, and other similar synonyms): Countries that have actively created economic zones designed to cater to export-oriented foreign manufacturers may be at risk of having trafficking in the supply chains that source from them, especially if those zones have lowered labor standards or relaxed other regulations in order to attract foreign investment. Because such EPZs facilitate global outsourcing of production, and because they often offer workers inside them fewer workplace protections and freedoms than workers enjoy outside, they can be associated with human trafficking risk.

c) Policy-Related Risk Factors in the Country of Production

Immigration policies limiting the employment options or movement of migrants: Countries with immigration policy frameworks that restrict the employment options or movements of migrant workers may pose a risk for human trafficking in the supply chains that source from them. Policies that tie guestworkers’ visas to particular employers, for example, may prevent workers from leaving exploitative or abusive employment situations for fear of losing their legal immigration status. Immigration policies that restrict settlement or movement by migrants similarly increase the vulnerability of migrant workers to human trafficking, by increasing the likelihood that they will experience multiple dependency on their employers, and be constrained in their ability to terminate their employment if they wish.²⁷

Guestworker Visas

A number of countries have “guestworker” visa programs that increase vulnerability to human trafficking among documented temporary immigrant workers. Some guestworker visa programs are extremely expensive and do not mandate that employers cover all recruitment, visa, and transportation costs. In many cases, these costs are passed on from employers to labor brokers to workers, many of whom have to take out high-interest loans or sign over deeds to their land in order to cover these costs. Some guestworker visas tie workers to particular employers and enshrine in law the penalty of deportation for leaving their employment, even if their employer is abusive or fails to abide by the terms of the contract.²⁸ Some countries’ immigration policies restrict the areas in which migrant workers may work, live, or travel, which increases their vulnerability to human trafficking by limiting their freedom of movement.²⁹ Finally, many countries fail in practice to monitor conditions of work adequately among guestworkers, further exacerbating their vulnerability.³⁰

In Gulf countries such as Qatar, the *kafala* guestworker system creates vulnerability to human trafficking among the large population of foreign workers. According to Human Rights Watch, there were 1.2 million migrant workers in Qatar in 2012, accounting for 94 percent of the country's workforce,³¹ and 99 percent of the private sector workforce.³² According to the United States Department of State, cases of withholding of wages, hazardous working conditions, poor living conditions, and passport confiscation were prevalent among guestworkers in Qatar. These exploitative practices, coupled with the *kafala* sponsorship system that tied workers to a specific employer and gave employers inordinate control over workers, created a high level of vulnerability of migrant workers to human trafficking.³³ In Qatar, provisions of the *kafala* or sponsorship system legally bind migrant laborers to their sponsor (*kafeel*). The sponsor reserves the right to dictate working conditions, the recruitment process, and workers' ability to leave their job. As a result, workers' labor mobility was significantly restricted, as workers were unable to legally change employers or leave their job without the permission of their sponsor.³⁴ The *kafala* system has been widely criticized for facilitating trafficking, including by the ILO, which stated that the *kafala* system "may be conducive to the exaction of forced labor."³⁵

Verité research on forced labor in the Malaysian electronics sector found that approximately one-third of the 438 foreign workers interviewed were in situations of forced labor. One of the factors that increased foreign workers' vulnerability to human trafficking was Malaysia's guestworker program. Under Malaysian law, a foreign worker is required to have a temporary employment visa, issued by the government. The employer must apply for the permit on behalf of the worker, and the foreign workers must already have an employer-sponsor before they can enter Malaysia on a temporary employment visa. Malaysian law thus channels recruitment through labor brokers, ties workers to their employers, and allows for the deportation of workers who leave their employment with their sponsor. It also establishes a levy that foreign workers must pay, increasing their debt. Additionally, foreign workers in Malaysia were monitored in part by the People's Volunteer Corps (RELA), a civilian organization empowered to assist the government in enforcing immigration law, which has been the subject of numerous allegations of abuse of foreign workers.³⁶

In 2010, Verité carried out in-depth research on human trafficking among agricultural workers in the United States. That research determined that guestworkers were even more vulnerable to labor trafficking than undocumented workers, primarily due to their high level of fees and indebtedness and the fact that these workers were legally bound to one employer. These workers were brought in on H-2A visas (for temporary agricultural workers) and H-2B visas (for unskilled, temporary work outside of the agricultural sector), for which they had to pay \$3,000-27,000, leading many to take out loans. Interest rates could be usurious, reaching up to 20 percent monthly, and moneylenders affiliated with brokers sometimes held workers' titles to land or other valuables as collateral. Once in the United States, workers were threatened with deportation, blacklisting, confiscation of land, and violence against themselves and their families if they complained.³⁷

Under current regulations, H-2B visas are subject to significantly less oversight and protections than H-2A visas. The United States Department of Labor's attempts to change the regulations for this visa program to include increased protections for workers have been stymied by legal challenges, and abuses continue. Verité research confirms that some workers have been brought in on these more lenient H-2B visas and then illegally forced to work in agriculture.³⁸ H-2B visa holders may face especially egregious labor rights violations, including in some cases, huge salary deductions. In one documented case, a worker's salary was reduced to 13 cents per hour, making it virtually impossible to pay back loans, and perpetuating the cycle of debt bondage.³⁹ In July 2014, a legal complaint was filed against a Christmas tree company that brought workers in from Mexico to work in California's Sierra Nevada mountains. The suit claims that workers were deceived about their pay, working hours, and reimbursement of transport costs; their passports were confiscated upon arrival; they were subjected to long working hours under

dangerous conditions for approximately \$50 per week after deductions; and they were isolated and threatened with injury or death if they failed to work fast enough or attempted to flee.⁴⁰ In this case, no complaint was brought to DOL's WHD, though action could have been taken under the current regulations and FLSA, if the Department had been made aware of the situation.

Lack of (or weak) bilateral agreements with migrant-sending countries: Countries that lack robust bilateral agreements about migrants' rights with the countries that send migrants to them pose a risk for trafficking. In the absence of such agreements, migrant workers' home country governments are in a weak position to enforce reasonable limits on recruitment fees or advocate for their citizens' rights in the migrant-receiving country. When these agreements are conducted in a nontransparent and non-consultative way, they may not adequately reflect concrete worker rights protections and therefore, may not effectively meet their objective of protecting workers. The lack of a bilateral regulatory framework for migration may also enable unethical recruiters and employers in the receiving country to exploit workers illegally, for example by emboldening the employers or recruiters to retain migrants' passports, or to compel workers to work overtime. Even when bilateral agreements do exist, if they are not created in a nontransparent and consultative way, they may not adequately reflect concrete worker rights issues, and therefore may not effectively meet their objective of protecting workers.

Failure to ratify ILO conventions related to human trafficking or rights of workers and migrants: Countries that have not ratified key International Labor Organization conventions prohibiting forced labor, and guaranteeing the rights of workers and migrants, can be at greater risk of having human trafficking in supply chains that source from them. While not in itself causal, the lack of governmental commitment suggested by failure to sign on to such conventions is likely reflected in other structural vulnerabilities to trafficking at the national level, as well as of a lack of political will to combat human trafficking. In addition, the review mechanisms associated with these conventions are often effective tools to support grassroots advocacy for government accountability; they are not accessible to civil society organizations in countries that are not parties to them. In addition, the review mechanisms associated with these conventions – that are often effective tools to support grassroots advocacy for government accountability – are not accessible to civil society organizations in countries that are not parties to that convention.

d) Environmental Factors in the Country of Production

Post-natural disaster contexts: Countries in which major natural disasters have recently taken place may pose an increased risk for human trafficking, due to the need for rapid staffing of low-skilled positions in environmental clean-up and construction.⁴¹ In the immediate aftermath of an emergency, normal procedures meant to check the potential for trafficking may be temporarily suspended, as strapped government agencies and private contractors scramble to meet immediate needs. Such contexts represent opportunities for unethical recruitment and human trafficking to flourish.

2. Risks Related to the Country Supplying the Labor

Note: The country supplying the labor may or may not be the same as the country of production/service delivery, depending on whether the industry in question relies predominantly on a local/national workforce or a migrant one. In either case, the following factors related to labor supply are associated with increased risk for human trafficking.

a) Political Factors in the Country Supplying the Labor

Political instability or conflict: Workers in countries experiencing political upheaval or open conflict are at heightened risk for being trafficked due both to a decrease in the overall rule of

law, and to increased general and personal insecurity, including increased likelihood of dislocation and dispossession. People in contexts experiencing profound political upheaval may lack options that enable them to resist exploitation by unethical recruiters or employers. Human trafficking vulnerability is often particularly acute for refugees.

High level of crime and violence: Workers in countries with high levels of crime and violence are often at increased risk for being trafficked, due to the increased vulnerability associated with individual economic or physical insecurity. In some cases, high levels of criminality and violence can also spawn forced migration.⁴² Trafficking risk may be particularly high in contexts controlled by organized crime syndicates, as these may be engaged directly in human trafficking as part of their broader criminal activities. High levels of crime and violence are also associated with low rule of law, suggesting that enforcement of protections for workers may also be relatively lax.

b) Socio-Economic Factors in the Country Supplying the Labor

Widespread poverty: The level and extent of poverty in a country is known to be a “push” factor for human trafficking. A recent UN ILO study of the economics of labor trafficking found that household food insecurity and the occurrence of income shocks that push people deeper into poverty are both strongly correlated with increased likelihood of being trafficked.⁴³ People suffering from extreme poverty generally have few options, and may take risks or make choices that increase their risk of being trafficked or caught in situations of forced labor. Impoverished migrants often rely on brokers to find them jobs overseas and facilitate their migration, and in the process incur debts that lock them into those jobs, even if they turn out to be different in nature, working conditions, or even location than had initially been promised. People who have had to put up title to the family farm as collateral on a loan to pay recruitment fees, or who have made the difficult decision to leave children or other family members behind in the hopes of earning enough to support them through work overseas, are not well-positioned to advocate for themselves in the face of unethical recruiters or employers seeking to exploit their labor illegally.⁴⁴

Widespread landlessness and dispossession: Countries in which large segments of the population have experienced loss of land or other property due to land grabs, political conflict, crime, natural disasters, forced resettlement, or economic policies resulting in dispossession are also at risk of human trafficking. When rural farmers are driven off their land by rebels, government officials, investors, environmental degradation, land fragmentation, or simple poverty, they become part of a landless underclass that has few economic options, and hence increased vulnerability to being trafficked.⁴⁵

High degree of gender inequality: A high degree of gender inequality in a country supplying labor may also be associated with risk of trafficking. In such contexts, women often have fewer rights and legal protections than men, and less access to the education necessary to obtain high-skilled jobs. Women may also be subject to discrimination in terms of wages, or in the kinds of jobs open to them. Women in gender unequal societies are often structurally dependent on men for financial security, leading women who lack access to male protection or wealth (for example, widows, unmarried women, and girls from poor families), with few resources of their own with which they might resist unethical recruiters and employers wishing to exploit their bodies or labor illegally.

c) Policy-Related Factors in the Country Supplying the Labor

Promotion of emigration/remittance economy: Countries that actively promote emigration of their citizens in anticipation of remittances may be at increased risk of trafficking, although this varies

depending on the regulatory regime put in place to manage out-migration. When remittances from abroad represent a key element of national development strategies and GDP, governments have an incentive to encourage their citizens to accept overseas employment arrangements, whether or not they are in their best interests. State-facilitated emigration has the potential to protect migrants from exploitation and trafficking, particularly if government programs include training, job placement and reintegration assistance, and a legal framework controlling and standardizing costs for migrants. When such programs are inadequately developed and supported in migrant-sending countries, however, the door is left open for unregulated flows of emigrants who are vulnerable to trafficking risks such as deceptive recruitment, payment of excessive recruitment fees, and debt bondage.

Lack of (or weak) bilateral agreements governing treatment of emigrant workers: Countries that lack robust bilateral agreements about immigrants' rights with the countries to which they send migrants pose an increased risk for trafficking. In the absence of such agreements, home country governments are in a weak position to enforce reasonable limits on recruitment fees or advocate for their citizens' rights once they arrive in the migrant-receiving country. The lack of a bilateral regulatory framework for migration may also enable unethical recruiters and employers within the receiving country to exploit their emigrants illegally, for example by emboldening them to retain migrants' passports, or to compel them to work overtime. Even when bilateral agreements do exist, if they are not created in a nontransparent and consultative way, they may not adequately reflect concrete worker rights protections, and therefore may not effectively meet their objective of protecting workers.

Failure to ratify ILO conventions related to forced labor or rights of migrant workers: Labor source countries that have not ratified key International Labor Organization conventions prohibiting forced labor and guaranteeing the rights of workers and migrants may be at greater risk of having problems with human trafficking. While not in itself causal, failure to sign on to such conventions is a red flag, due both to the absence of international scrutiny and to the lack of commitment to address the problem it suggests on the part of government.

d) Environmental Factors in the Country Supplying the Labor

Post natural disaster contexts: Countries that have recently experienced natural disasters may be at increased risk for trafficking, due to the dislocation and sudden impoverishment that often characterize the experience of survivors of environmental catastrophes. People directly harmed in disasters have often lost all or most of their personal resources, and may be physically or emotionally traumatized as well. Such people are at increased risk of vulnerability to human trafficking.⁴⁶

Ongoing contexts of environmental hardship: Countries with ongoing environmental challenges such as deforestation, fisheries collapse, recurring drought, or diseases affecting staple crops are also at greater risk for trafficking, due to the association of such hardships with pervasive poverty and insecurity. Trafficking risk caused by such environmental factors is likely to increase over time as a result of ongoing climate change.

Summary of Key Risk Factors for Human Trafficking in Global Supply Chains:

1. Hazardous/undesirable work
2. Vulnerable, low-skilled, easily replaced workforce
3. Migrant workforce
4. Presence of labor contractors, recruiters, agents, or other middlemen in labor supply chains
5. Long, complex, and/or non-transparent product supply chains
6. Substantial sourcing or subcontracting in high risk countries.

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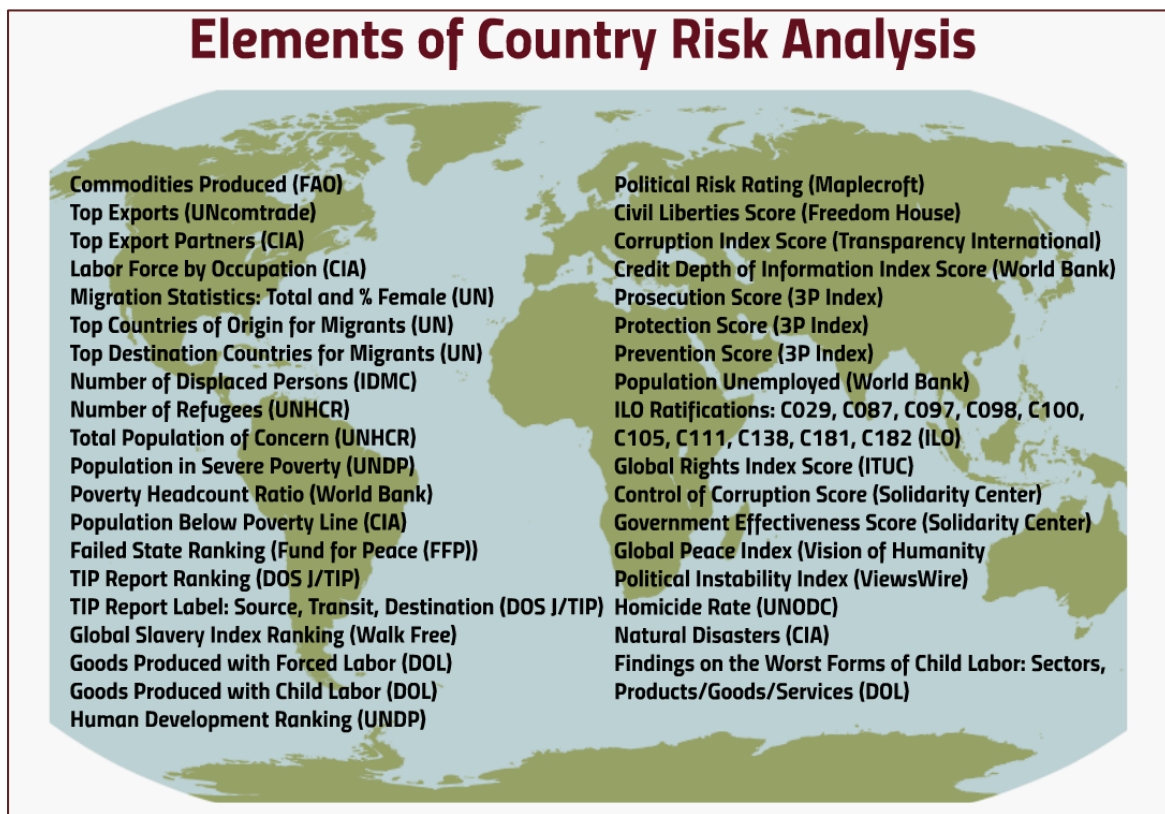
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III. Methods/Process for Supply Chain Research

Verité undertook four different kinds of broad research in order to gather the data for this report: research on specific countries, research on specific commodities, research on key economic sectors, and research on federal procurement patterns.

A. Country Research

The project began with research on each of the world's 235 countries and territories. An extensive spreadsheet was created collecting publicly available data on any variables that might be correlated with a country's likelihood of enabling or being at risk for human trafficking. The data points collected for each country included data on trade patterns; labor markets; migration and refugee flows; poverty and economic development levels; incidents of forced labor and child labor; political stability and instability; extent of rule of law; corruption levels; protections for civil liberties and human rights; participation in International Labor Organization labor rights conventions; and occurrence of natural disasters. A complete list of data collected is presented below:



In the months ahead, Verité will be analyzing these and other data points and collaborating with Made in a Free World to develop a web-based tool for using them to evaluate the risk of trafficking associated with particular countries and supply chains. In some cases, preliminary analysis of trafficking risk in the major supply chains for specific sectors and commodities is incorporated into the sector and commodity reports below.

The key risk factors for human trafficking associated with specific geographic supply chains are summarized in the following two figures, one that addresses key risks associated with the country of production or service delivery, and the other risk factors associated with the country supplying the labor. Verité anticipates that these risk factors will form the analytic basis for the eventual web-based tool to be developed for evaluating human trafficking risk in specific supply chains.

Key Risk Factors Associated with the Country of Production or Service Delivery

- Low level of legal protections for civil liberties or workers' rights
- High level of corruption, lawlessness, and/or violence
- Emergent or crisis contexts requiring rapid labor deployment
- Policy environment encouraging immigrant labor without safeguarding migrants' rights

Key Risk Factors Associated with the Country Supplying the Labor

- High degree of poverty
- Widespread landlessness/dispossession
- Political instability and lawlessness (especially organized crime)
- Policy environment promoting emigration/remittance economy, without adequately safeguarding emigrants' rights
- Widespread vulnerability due to natural disaster, drought or other environmental hardships

B. Sector Research

To identify the sectors in the global economy most likely to be at risk for human trafficking, Verité first developed the analytic framework for evaluating risk factors for human trafficking presented in Section II of this report. To identify a comprehensive list of global economic sectors, Verité took the sector list offered by the UN International Labor Office as a starting point,⁴⁷ and evaluated each sector against the matrix of key risk factors developed in Section II. Based on this analysis, eleven sectors or industries were found to be most at risk. Reflecting Verité's accumulated understanding of the association of trafficking risk with certain kinds of economic activities, some of the ILO sectors were combined into umbrella categories, and others were disaggregated into subsectors, to allow for as targeted a discussion of human trafficking patterns as possible.

The eleven most at-risk sectors identified through this analysis are discussed in depth in the sector reports in Section IV below. Each report provides a macroeconomic overview of the global sector in question, discusses the key risk factors for human trafficking unique to it, describes specific case studies where examples of trafficking in persons have been uncovered within the sector, and, to the extent possible at this preliminary stage, discusses the geography of trafficking risk within the sector's main supply chains.

C. Federal Procurement Research

In addition to carrying out research on countries, commodities, and sectors, Verité also undertook research designed to identify overlap between federal procurement patterns and global supply chains at risk for trafficking in persons. Toward this end, Verité carried out an extensive analysis of the federal spend, examining both spending by individual federal agencies, and federal spending on particular kinds of goods and services. Using publicly available data from the Federal Procurement Data System (www.fpds.gov) and USASpending (www.usaspending.gov), as well as information garnered in interviews with key federal acquisitions officers, Verité examined federal procurement patterns for their intersection with the global economic sectors identified as being at heightened risk for human trafficking. The analysis documented the amount spent directly by the United States Government in key at-risk sectors, and in some cases also identified the scale of primary inputs from at-risk sectors lower down in key federal supply chains.

To the extent possible, Verité procurement research also sought to uncover relevant industry patterns in the supply of key federal purchases, for example the highly consolidated provision of military foodstuffs through central suppliers overseas, reliance on large-scale facilities and logistics management contractors, and the sourcing of uniforms and other manufactured goods from UNICOR/Federal Prison Industries.

Federal procurement within the key at-risk sectors is discussed at the conclusion of each sector report below.

D. Commodity Research

A second major area of Verité research has involved collection of information on 48 of the world's most important primary commodities. A master commodity spreadsheet was assembled of data points for each primary commodity on global production and trade patterns (main countries of production and consumption, and export-import data for key producers, importers, and for the United States), reports of forced labor or child labor associated with the commodity, and the names of any countries in which trafficking-related problems have been reported in association with the commodity.

Using the general information assembled in this spreadsheet as a starting point, each key commodity was then researched in depth, with the findings compiled into a forthcoming set of comprehensive commodity analyses. The individual commodity reports provide background on the production patterns and labor practices involved in the specific industry in question. They also describe the association of the commodity with forced labor or child labor, provide case studies of documented instances of human trafficking in the industry, describe the structure of the commodity supply chain and any links to other supply chains for which the commodity is a key input, and review any government or industry initiatives that exist to reduce human trafficking in conjunction with the commodity in question.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	JJ	JK	JL	JM	JN	JO	JP	jq	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PQ	PR	PS	PT	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	Y
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According to the U.S. Department of Labor's 2013 *List of Goods Produced by Child Labor or Forced Labor*, bricks are produced with forced labor (FL) and child labor (CL) in the following

Top ten countries that export bricks worldwide (UN Comtrade 2012):	Top ten countries from which the U.S. imports bricks (UN Comtrade 2012):
<p>China</p> <p>India</p> <p>United States</p> <p>Germany</p> <p>France</p> <p>Italy</p> <p>Spain</p> <p>United Kingdom</p> <p>Canada</p> <p>Japan</p>	<p>China</p> <p>India</p> <p>United States</p> <p>Germany</p> <p>France</p> <p>Italy</p> <p>Spain</p> <p>United Kingdom</p> <p>Canada</p> <p>Japan</p>

Top ten countries from which the U.S. imports bricks (UN Comtrade 2012):

According to the U.S. Department of Labor (2013), bricks are among the manufactured goods most commonly produced with forced or child labor. They are produced with forced labor in Afghanistan, Burma, China, India, Nepal, North Korea, and Pakistan; and child labor in Afghanistan, Argentina, Bangladesh, Bolivia, Brazil, Burma, Cambodia, China, Colombia (clay), Ecuador, India, Nepal, Pakistan, Paraguay, Peru, Uganda and Vietnam.

What does forced and/or child labor in brick production look like?
The nature of forced labor in brick production varies widely by region. It has been studied extensively in India and Pakistan, where forced labor is likely to result from a combination of caste relationships and



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Aluminum	Copper	Melons	Strawberries
Bamboo	Corn	Nuts	Sugar
Bananas	Cotton	Palm Oil	Sunflowers
Beans	Diamonds	Pineapple	Tea
Brass	Fish	Rare Earth Metals	Titanium
Bricks	Flowers	Rice	Tobacco
Cattle	Gold	Rubber	Tomatoes
Charcoal	Granite	Salt	Wheat
Citrus	Jewels	Shrimp	Wool
Cocoa	Lead	Silk	Zinc
Coffee	Leather	Silver	
Coltan/Tungsten/Tin	Meat Processing	Steel	

IV. Sectors with Significant Federal Procurement and Significant Risk of Human Trafficking

Agriculture

This sector report covers labor in agriculture and meat production and processing. For information on the human trafficking risks associated with particular agricultural commodities, see the forthcoming commodity reports: [Bananas](#), [Beans and Pulses](#), [Cattle](#), [Citrus](#), [Cocoa](#), [Coffee](#), [Corn](#), [Cotton](#), [Flowers](#), [Meat Processing](#), [Melons](#), [Nuts](#), [Palm Oil](#), [Pineapple](#), [Rice](#), [Strawberries](#), [Sugar](#), [Sunflowers](#), [Tea](#), [Tobacco](#), [Tomatoes](#), and [Wheat](#).

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☒ Long, complex, and/or non-transparent supply chains

Overview of the Agriculture Sector:

Agriculture is used here to refer to the production of crops and livestock and animal products for both consumption and other uses. Key agricultural products include: cereals/grains, vegetables, roots/tubers, milk, fruit, meat, oil crops, eggs, and grain legumes.⁴⁸ The amount of labor needed varies depending on the type of crop. Labor intensive crops, particularly those that are hand-picked, may be more likely than mechanically harvested crops to engender labor rights abuses. These include: lettuce/greens, berries, oranges/citrus, apples, stone fruits, melons, tobacco, cotton, and greenhouses/nurseries. Workers are involved in a variety of tasks including preparation, planting, weed and pest removal, harvesting and initial processing/packing. Livestock production includes animal husbandry as well as meat processing and packing. Animal husbandry includes both small-scale and intensive factory farming.

Economy:

Over one billion people are employed in the agricultural sector worldwide. In 2009, 35 percent of global employment was in agriculture. Although agricultural growth is declining worldwide, it remains an important source of income and food security in many economies. Agriculture accounts for approximately 59 percent of employment in Sub-Saharan Africa, 44 percent in South East Asia and the Pacific, and 16 percent in Latin America.⁴⁹ Agricultural participation is lower in the European Union, at about five percent,⁵⁰ and approximately two percent in the United States.⁵¹

Although agriculture generates a relatively small part of its GDP (less than two percent), the United States is the world's leading exporter of agricultural products, in addition to being a strong market for domestic consumption.⁵² While the majority of farms in the United States are small operations ("rural residence farms"), the majority of production comes from a relatively small number of commercial farming operations. The United States Government supports the domestic agricultural sector primarily through a range of subsidy programs.

Globally, agriculture's contribution to GDP is approximately 3.2 percent.⁵³ However it plays a larger role in the economies of developing regions, especially in Africa. According to the World Bank, "agriculture

accounts for 30 to 40 percent of Africa’s total gross domestic product (GDP), and almost 60 percent of its total export earnings.”⁵⁴

The meat and poultry industry is the largest segment of agriculture in the United States, and industrial farming operations constitute the vast majority of producers. Total meat and poultry production in 2011 reached more than 92.3 billion pounds, an increase of 200 million pounds from 2010. Worldwide, approximately 74 percent of poultry, 43 percent of beef, 50 percent of pork, and 68 percent of eggs are produced in industrial farms.⁵⁵

Workforce:

Multinational companies that trade and market commodities are increasing their share of the agricultural sector. As large companies use land previously used by farmers for subsistence farming, indigenous peasants engaged in subsistence agriculture are driven into paid work on larger farms or plantations. Large farms and plantations with considerable staffing needs are also more likely to rely on labor contractors, brokers, and recruiters to provide labor. Small-scale farms are more likely to operate informally. For example, those that hire only a few workers on a temporary basis may rely on verbal agreements in place of contracts.

There are two primary groups of farm workers: subsistence farmers and their families who work on their own land, and waged workers. Over 40 percent of agricultural workers are waged.⁵⁶ Waged workers do not own or rent the land on which they work or the tools and equipment that they use. There are many agricultural employment arrangements, including, “permanent agricultural workers; temporary agricultural workers; seasonal/casual agricultural workers; migrant agricultural workers; piece rate workers; or workers receiving some kind of in-kind payment.” Small-scale farmers may also work seasonally or part-time as waged agricultural workers to supplement their incomes from subsistence agriculture.⁵⁷

Agricultural workers generally earn low wages and earn less than workers in industrial settings. The wide variety of employment arrangements and the high levels of informal agreements lead to low levels of organization and unionization. Further, agricultural workers are often excluded from legal protections, including on wages, hours, and working conditions.

Processed Foods

“Processed food” refers to foodstuffs that have been processed, converted, prepared, preserved and/or packaged.⁵⁸ This sector also includes beverage production. Processing can be mechanized, or done by hand in a more labor intensive form. Types of labor include production workers (skilled precision workers, machine operators, line workers), graders, sorters, packagers, transporters/drivers, supervisors, and managerial and professional workers.⁵⁹ Processed foods include highly processed foods, such as snack foods with many ingredients, as well as items such as bread and cheese.

The growth of the world’s food market has largely been attributed to the growth of processed foods and drinks, and the sector represents one of the largest manufacturing sectors in the United States.⁶⁰ The majority of the growth in the sector, however, has been in developing countries, such as Brazil and China. Despite the growth of the sector, employment has grown at a slower pace due to increased mechanization.

The workforce is generally low-skilled, with the majority of production or line positions requiring little formal education.⁶¹ Due to the low-skilled nature of work and low barriers to entry, many jobs in the sector are held by vulnerable populations including minority and migrant workers.⁶² As in other sectors, including agriculture more broadly, migrant workers are vulnerable to a constellation of indicators of

trafficking. They may have debt linked to their recruitment process, or their visa status may tie them to a single employer.⁶³ Undocumented migrants may be susceptible to intimidation and threats of deportation.

While specific data is not disaggregated from broader data on workers in all types of manufacturing, many jobs in the food processing sector are temporary, casual, part-time, or contracted, and workers often lack social protections afforded to workers in other sectors.⁶⁴ Many of these “temporary” workers are hired through third-party staffing agencies, and thus often lack a direct employment relationship with their worksite.⁶⁵ In the United States, 42 percent of temporary workers were in light industry, which encompasses most food processing workers.⁶⁶ According to the National Employment Law Project, these workers face vulnerabilities including greater health and safety risks, wage theft, and discrimination.⁶⁷ Further, workers may be classified as “temporary” even if they have been engaged at the same workplace for years.⁶⁸ Migrant and minority workers are also overrepresented among temporary and contracted workers in the United States.⁶⁹ The food processing sector in the UK has been similarly linked to temporary, subcontracted workers and migrant workers.⁷⁰ Demand for many processed foods ebbs and flows on a seasonal basis,⁷¹ so food manufacturers may prefer temporary work arrangements for seasonal flexibility.

Like other forms of manufacturing, global food processing may take place in Export Processing Zones (EPZs), where labor protections are weaker and governments have lower levels of oversight.⁷² Another potential risk area is small, informal food processing plants in developing countries, where workers are more likely to have unfavorable conditions of work than workers in more formal work settings, according to the ILO.⁷³

Food processing work is one of the most hazardous sub-sectors in manufacturing. Hazards include extreme temperatures and noise, repetitive motions, and slips and falls.⁷⁴ Workers also operate heavy machinery that can be hazardous without adequate protective mechanisms. In 2012, workers in the food processing sector in the United States were injured at a greater rate than workers in manufacturing more broadly.⁷⁵ In New York City alone, a recent study found that over 40 percent of food processing workers had been injured on the job.⁷⁶ Additional examples include a Guatemalan migrant worker who died in 2011 after falling into an industrial dough mixer at a tortilla production plant in Brooklyn, New York⁷⁷ and in that same year, a worker died after being crushed in a hummus grinder in Massachusetts.⁷⁸

Risks to Human Trafficking in this Sector:

The United States Department of State’s 2014 *Trafficking in Persons Report* noted evidence of human trafficking in the agriculture sector in the following countries: Afghanistan, Angola, Argentina, Armenia, Australia, Austria, Barbados, Benin, Bolivia, Brazil, Bulgaria, Burma, Cabo Verde, Cambodia, Cameroon, Canada, Central African Republic, Chad, Chile, China, Colombia, Comoros, Costa Rica, Cote d’Ivoire, Croatia, Cyprus, Czech Republic, the Democratic Republic of the Congo, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Eritrea, Fiji, Finland, Georgia, Germany, Ghana, Greece, Guatemala, Guinea, Guinea-Bissau, Guyana, Hungary, Indonesia, Iran, Israel, Italy, Kazakhstan, Kenya, Libya, Madagascar, Malawi, Mali, Mexico, Mongolia, Mozambique, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, North Korea, Oman, Pakistan, Palau, Paraguay, Peru, Philippines, Portugal, Romania, Russia, Senegal, Sierra Leone, Slovakia, Somalia, South Africa, Spain, Sri Lanka, St. Vincent and the Grenadine, Syria, Swaziland, Switzerland, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Uganda, Ukraine, United Kingdom, Uruguay, United States, Uzbekistan, Vietnam, Zambia, and Zimbabwe.⁷⁹

Hazardous/Undesirable Work:

According to the ILO, agriculture is one of the most hazardous sectors in the world, accounting for approximately half of all fatal accidents. The ILO notes that rates of accidents have stayed relatively

steady in agriculture, even as they have fallen in other fields. Further, because of the casual nature of much of the agricultural sector, actual rates are likely to be much higher due to a lack of monitoring and the fact that many accidents go unreported.⁸⁰ Although specific risks vary depending on the crop or sector, general risks include physically demanding work, exposure to extreme weather, carrying heavy loads, repetitive motions, use of dangerous tools and equipment, exposure to pesticides and agrochemicals, animal attacks, and working at heights. Because of the hazardous nature of some of the work in the agricultural sector, child labor in the sector sometimes falls under the worst forms of child labor. It is important to note that not all child work in agriculture constitutes child labor or worst form of child labor – this is particularly the case on farms where work is light, tasks are age-appropriate, and work does not interfere with educational opportunities. In many cases, light agricultural work is culturally viewed as an opportunity for the child to gain livelihood skills and contribute to the family’s food security. However, because of the hazardous nature of many agricultural tasks, the appropriateness of the task is critical.

Heatstroke is a leading cause of farmworker death. Farmworkers are at great risk for heatstroke and other heat-related illnesses because of the amount of time they spend in the direct sun, particularly during warmer months. Heavy clothing required for some jobs can exacerbate the problem. Further, many workers do not have access to potable water and are not afforded breaks or shade.⁸¹

Some risks are crop-specific, such as green tobacco sickness (GTS) in tobacco harvesting. GTS is a result of nicotine absorbed through the skin and can cause nausea, vomiting, headaches, muscle weakness, and dizziness.⁸²

According to the Occupational Safety and Health Administration (OSHA), “the meat slaughtering, processing, and packaging industry has long been associated with a high rate of accidents, injuries, and illnesses.”⁸³ As described by Human Rights Watch, workers in these plants must work on lines that move far too quickly for worker safety. Repetitive motion injuries are particularly common. Workers may also be required to work long overtime hours, under threat of dismissal for refusing to do so.⁸⁴

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

Due to the extent of smallholder farms in global agriculture, much of agricultural labor takes place in the informal economy, which tends to be less regulated. Even on commercial farms, agricultural labor is often excluded from labor protections afforded to other sectors.⁸⁵ Wages are often lower than in other sectors, and are often paid on a piece-rate or quota basis. Piece-rate wages (paid by volume, weight or number of product harvested) create a risk that workers will be paid extremely low wages, possibly under the legal minimum wage. Further, piece-rate wage structures create disincentives to take breaks, increasing the risk of heat-related illnesses. Quotas may lead to financial penalties for workers who fail to meet them. In the Liberian rubber sector, tappers are paid by production and have a quota of the number of trees they must tap per day. Those who do not reach the quota are subject to financial penalties. Additionally, wages may vary from month-to-month as paycheck deductions are made for food, school fees, and savings.⁸⁶ Both piece-rate and quota wage structures also encourage workers to use family labor or informal sub-contracted workers, including children.

The ILO estimates that 60 percent of all children engaged in child labor work in agriculture.⁸⁷ Most are unpaid family members working on family farms, although some also work alongside their parents in waged agricultural jobs or independently. There is a relatively low age of entry for child labor in agriculture, with some children starting as young as five- to seven-years-old. “Push” factors for child labor in agriculture include poverty, limited access to education, and “traditional attitudes towards children’s participation in agricultural activities.”⁸⁸ Children may be more likely to work on farms during peak labor periods, such as planting and harvesting.⁸⁹ When harvests overlap with the school year, children are likely to leave school at least temporarily. For example, in rice growing regions of Uganda,

up to 50 percent of children leave school for the harvest.⁹⁰ Children of migrant farmworkers, who are likely to work on farms themselves, may also be more likely to abandon their education early. Particularly when migrant families move following crop cycles, children do not have an opportunity to stay enrolled in school.⁹¹ In some countries, including the United States, the legal minimum age for employment in the agricultural sector is lower than in other sectors. This reflects traditional attitudes that farm labor provides children with economic and social opportunity.⁹²

Women produce half of the world's food and up to approximately 90 percent of staple crops, primarily as smallholder or subsistence farmers.⁹³ However, most women lack access to credit, inputs, markets, training, and tools.⁹⁴ Further, much of women's labor in agriculture is unpaid. In the case of family labor, even when a woman is responsible for the majority of the planning and labor, she may be required to cede control of the profits to her husband. As hired wage labor on larger farms, women may work towards their husbands' quotas or piece-rates, never receiving their own pay. Further, women in agriculture often face high levels of sexual abuse and harassment. In the United States, there have been documented cases of migrant farm workers facing high rates of abuse at the hands of farm labor contractors, who oversee workers' hours, wages and living arrangements. Often fear of retaliation or deportation strongly discourages women from reporting abuse.⁹⁵

Smallholder farmers also face myriad challenges including lack of access to markets, lack of capital for input purchases, high marketing costs, and limited resources including labor and land.⁹⁶ Further, farmers face price volatility – particularly of commodity crop prices – and in some years, may operate on extremely slim, or even negative profit margins.⁹⁷ Some farmers may face increasing debt as they take out loans – possibly with disadvantageous terms – to finance their operations. The NYU School of Law Center for Human Rights and Global Justice describes how economic reforms and global market forces have led to sharply decreased profits for Indian cotton farmers. These farmers frequently finish a crop cycle without enough money to purchase inputs for the following year, leading them to take on increasing loans with high interest rates. This creates a cycle of debt.⁹⁸ Indebted farmers may be more likely to rely on unpaid family labor, including child labor.⁹⁹

Vulnerability to forced and child labor can be linked to land rights and land share agreements. In Malawi, tobacco farming families make agreements with landowners whereby they receive a portion of the profit from the tobacco harvest in exchange for labor in growing and harvesting the crop.¹⁰⁰ Tenants are generally expected to pay for seeds and other expenses. Because this system rarely results in profit for the tenants, they remain in a situation of debt bondage.¹⁰¹ In Pakistan, over 75 percent of land is owned by about five percent of farmers, leaving over one half of farmers landless.¹⁰² Poor and landless farmers often work in sharecropping agreements and many are indebted to landowners, forcing them to work under debt bondage. In some cases, indebted landless farmers may be sold to other landowners.¹⁰³

Subsistence farmers who have been forced off of their land by land grabs are especially vulnerable to becoming victims of labor exploitation and human trafficking. In the Guatemalan palm oil sector, Verité research found examples of subsistence farmers who sold their land due to coercion and deceit, including false promises of permanent jobs or rumors that their land would be flooded by a hydroelectric dam. These farmers became completely dependent upon the palm plantations for employment, as there were few other jobs in the area and they no longer had land on which to plant their own crops. Permanent jobs did not materialize in palm plantations and they were instead given temporary employment and paid sub-minimum wages. When they complained or protested, they were blacklisted. Therefore, these workers had to either tolerate the substandard conditions or move out of the areas in which they had grown up.¹⁰⁴

In many cases, agricultural workers are housed and fed by their employers, who sometimes make excessive deductions from workers' wages for these services. Employer-provided housing and food are in many cases sub-standard, and workers generally have no other options available if they wish to continue

working on the farms. This also creates multiple levels of dependency on their employers, an indicator of labor trafficking. For example, Verité research in Guatemala revealed that most coffee sector workers lived in *galeras*, which are long buildings that generally have roofs but have dirt floors and sometimes lack doors.¹⁰⁵ In the palm oil sector, hundreds of workers are housed in each *galera* and are provided with cots or bunk beds that are located in close proximity to one another and lack privacy or access to safe places in which to store their possessions.¹⁰⁶ Verité interviewed 372 workers employed in Guatemala's coffee sector, 241 (64.8 percent) of whom reported that they lived in employer-provided housing and only one worker (0.3 percent) reported having alternative housing options. As almost two-thirds of workers depended upon their employer for housing, dismissal from their jobs would inherently mean the loss of shelter, even if eviction were not explicitly threatened. Of the 372 workers interviewed, 46 percent reported that their housing did not provide them with enough space, 34.1 percent reported the housing was unclean, 60 percent reported their housing was unsafe, and 96 percent reported their housing lacked a kitchen. In addition, 165 workers (44.4 percent of the 372 workers interviewed) reported that their employer had provided them with food, and 78 (21 percent) reported being charged for food. Seventy-nine percent of workers interviewed reported not having enough food to eat while they were working on coffee fincas.¹⁰⁷

Migrant Workforce:

There is a high degree of migrant labor in agriculture. In economically developed countries, the migrant worker population tends to be composed of transnational migrants from poorer countries.¹⁰⁸ For example, the majority of migrant workers in the United States are from Latin American countries and migrant workers from sub-Saharan Africa work in agriculture in European countries.¹⁰⁹ In developing economy countries with higher rates of subsistence agriculture, there are lower rates of transnational migrants, but there are large numbers of internal migrants in the agricultural sector. Migrants may settle near a particular farm, “shuttle” between their home and worksite, or follow crop harvesting cycles from farm to farm.¹¹⁰ In some cases, migrant workers may work in subsistence agriculture on their own land during part of the year, and migrate to larger farms or plantations during labor intensive harvesting seasons.

In the United States, migrant workers in agriculture come primarily from Mexico, Guatemala, and other Latin American countries. These migrant workers are employed in crop agriculture, animal husbandry, and meat processing. Migrant agricultural workers may enter the United States on a visa or they may be undocumented. Migrants may be provided with H-2A visas for most low-skilled agricultural work, but forestry workers may be employed under H-2B visas. The H-2 program is widely criticized by worker advocates for lacking adequate protections for work, health, and housing; legalizing the payment of subminimum wages; and – because workers are, for practical purposes, bound to work for one or more employers – entrapping workers at specified worksites for the duration of their stay in the United States.¹¹¹ Many H-2B visa holders face especially egregious violations, including in some cases, huge salary deductions. This in turn often makes it virtually impossible to pay back loans taken out to secure jobs, thereby perpetuating the cycle of debt bondage (see the [Guestworker Visas](#) pullout box for more information).¹¹² Because of the lack of protections, there have been cases of workers entering the United States on H-2B visas and then being forced to work in agriculture.

Undocumented workers are also vulnerable to human trafficking in agriculture in the United States. These workers, the vast majority of whom are from Latin America, are typically smuggled or trafficked over the border with Mexico by “coyotes,” who are, in some cases, also their labor brokers or employers. Because of their undocumented status, these workers are by nature more vulnerable to abusive labor practices and human trafficking. In some egregious cases, coyotes hold workers hostage either until their families pay additional money or until they provide a certain amount of labor.¹¹³ Agricultural jobs, which are generally undesirable in the United States, may be the only viable livelihood option for these workers. A Human Rights Watch report on workers in meat processing quoted a worker who said “they have us under threat

all the time. They know most of us are undocumented – probably two-thirds. All they care about is getting bodies into the plant. My supervisor said they’ll call the INS if we make trouble.”¹¹⁴

Migrant workers in the United States working in agriculture tend to continue their movement once in the country. Most workers follow seasonal harvests in established “streams.” In the East, workers move from Florida to Ohio, New York and Maine. Workers in the Midwest travel a circuit of nearly every Midwestern state. The West stream begins in California and travels up the coast to Washington, and sometimes to North Dakota.¹¹⁵

The crop cycle timeline can increase the vulnerability of agricultural migrant workers to human trafficking. Farmers who hire migrant workers, whether international or domestic migrants, may not pay them until their crops are sold at harvest. This delayed payment limits workers’ ability to leave the worksite or job if the working conditions deteriorate. For example, some workers on coffee plantations in Guatemala are not paid until the end of the season. They are told that if they leave, or do not harvest adequate amounts of coffee beans, they will be denied their pay for the entire season.¹¹⁶ These workers may be more likely to solicit loans from their employer or other money lenders to cover their living expenses, leaving them vulnerable to debt bondage.

Migration of entire families in the agricultural sector can also increase the risk of worst forms of child labor. For example, relatively wealthier countries with booming banana sectors, including the Dominican Republic and Costa Rica rely heavily on migrant workers from countries such as Nicaragua and Haiti. Child labor often occurs when children accompany their parents to plantations to supplement family income.¹¹⁷ Migrant children may accompany their parents to the fields because they lack access to education. A 2010 Human Rights Watch report on the tobacco sector in Kazakhstan found that migrant families experienced indicators of labor trafficking such as document retention and withholding of wages. Children were also found to be harvesting tobacco with their parents in an effort to help their parents harvest enough tobacco to earn a reasonable end-of-season payment.¹¹⁸ In West Africa, juveniles who migrate both independently and through brokers are engaged in trafficking in the cocoa and cotton sectors. In some cases, these children migrate within well established family or community “kinship” systems. Although the migration may be voluntary initially, juveniles may be exploited upon arrival, including in forced labor.

Agricultural worksites are often geographically remote, leading to the isolation of migrant workers, limiting their ability to leave the worksite or even to communicate with the outside world. This isolation is compounded via document retention and the threat of deportation. In the sugar sector of the Dominican Republic, for example, instances have been found in which Haitian workers were physically confined to sugar plantations, sometimes under armed guard, and their migrant worker identity cards were retained, leaving them unable to leave the plantation.¹¹⁹ A lack of documentation, support systems, and local language skills result in another level of social isolation of migrant workers and make it difficult for them to file complaints if their rights are violated.

Internal Verité research has found that migrant workers at industrial meat production and processing facilities in developing countries face similar risks to workers in other types of factory settings in that country. If a country’s factory workforce is heavily dependent on migrants (either international or domestic workers), those workers are likely to be heavily represented in the industrial farm sector. For example, at industrial farms in Malaysia, migrant workers face risks of human trafficking indicators similar to workers at other factories in the country.

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in Labor Supply Chain:

Labor recruiters play a variety of roles in agriculture, and labor in the agricultural sector is increasingly subcontracted.¹²⁰ The mechanisms of broker-induced labor trafficking vary depending on countries and

contexts. In the Indian sugar sector, migrant workers in the state of Tamil Nadu are recruited by labor brokers who provide advances for transportation and living expenses, to be repaid at the end of the harvest season. However, due to high quotas as well as the disparity in power and information between brokers and workers, workers often end the season in debt.¹²¹ In the Guatemalan palm oil sector, workers are recruited from impoverished rural areas through labor contractors. The contractors deceive workers about conditions of work, and charge workers fees of up to 20 percent of their pay.¹²² In Malaysia, workers from Southeast Asia recruited by labor brokers are reportedly trafficked to work on palm oil plantations.¹²³

Labor “cooperatives” sometimes act as employment agencies.¹²⁴ These are not cooperatives in the traditional sense, in which small and medium enterprises jointly maximize their marketing potential. Instead, these worker cooperatives recruit workers into a larger labor pool and contract this labor out to plantations or other employers.¹²⁵ In these cases, the cooperative functions similarly to an employment agency or labor recruiter. The worker’s employment relationship is with the cooperative, rather than the plantation. These cooperatives are prevalent in certain industries in Colombia and the Philippines.¹²⁶

In some cases, labor intermediaries in the agricultural sector are highly informal – particularly for children. A study of child workers in the cocoa sector found that of children recruited by an intermediary, 94 percent in Cote d’Ivoire knew the recruiting intermediary personally, as the intermediary often has connections to the child’s home village.¹²⁷

In the United States, farm labor contractors or “crew leaders” provide labor to farmers. Various types of contractors provide an estimated 75 percent of farm labor in California.¹²⁸ Some labor contractors work for large formal operations and have their own subcontractors, while others are individuals operating independently. Some labor contractors manage workers on site and provide housing and transportation. The presence of these labor contractors creates a barrier between farmers and the workers on their farms, leaving workers vulnerable to sub-minimum wages, high deductions, and unsafe housing and transportation. Even when employers pay labor contractors above the minimum wage per each worker employed, these payments are often not passed onto workers by the labor contractors, who make excessive deductions for transportation, housing, food, and other services. There have also been cases in which labor contractors have threatened and beaten workers who have tried to leave their employment.¹²⁹

Long, Complex, and/or Non-Transparent Supply Chains:

There are many permutations of agricultural supply chains. Some are relatively short and transparent. Some fruit/vegetable products, for example, may be harvested, packaged, and then distributed to retailers. This is more likely to be true for “whole” products (e.g., apples). Where agricultural products are used as ingredients in processed food products, more processing steps are involved, and materials from many different suppliers are likely to be combined at the processing level. Actors involved in the supply chain from agricultural raw material to food or beverage product include:¹³⁰

- Supplier: provides materials to another company. May include producer, co-manufacturer, repacker.
- Brokers: facilitate transactions between buyers and sellers. May purchase goods from producers or other brokers and sell to processors.
- Manufacturer: Produces finished products and owns the brand name, processes and product specifications.
- Co-manufacturer: transforms food product, but does not own brand name. Supplies finished goods on contract agreement.
- Distribution channel: chain of intermediaries passing the product along the chain before it reaches end-user.
- Distributor: A company or individual arranging for transfer of goods, but who does not produce goods.

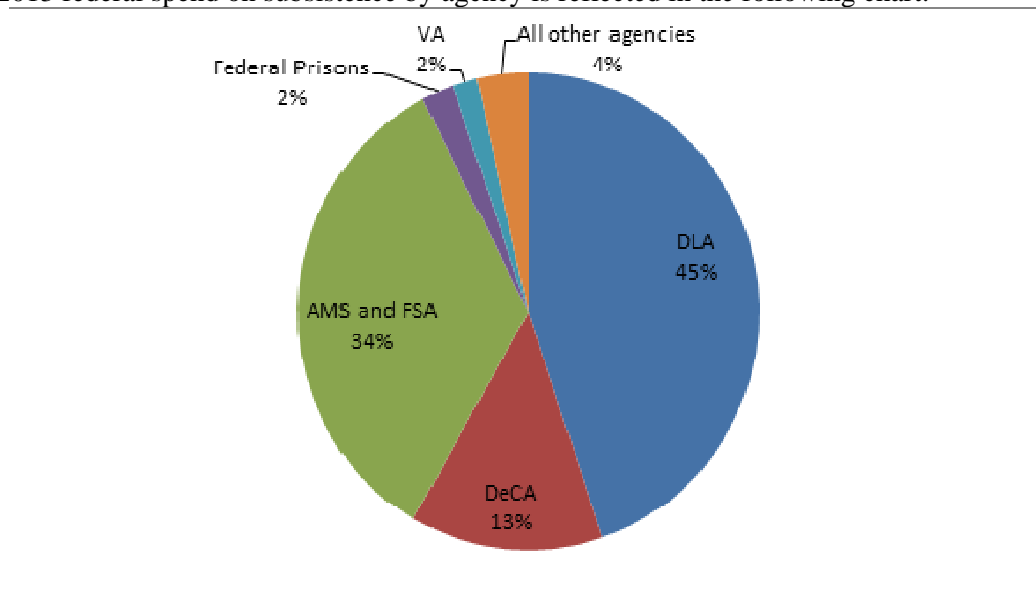
- Re-packer: Re-packs products manufactured elsewhere.
- Shipper: transports products. Shipper may or may not be manufacturer, is often a third party. Shipper may also be separate from the transporter.

The involvement of each type of actor can further obscure an ingredient's origins, leaving the end-user with little visibility into working conditions.

Federal Procurement in the Agriculture Sector:²

Agricultural goods and processed foods derived from them are procured by a number of federal agencies. The largest spender is the Defense Logistics Agency (DLA), which buys nearly all subsistence provisions for the nation's armed forces. The DLA is joined by the Defense Commissary Agency (DeCA), which purchases food to stock the military commissaries. The other principal spenders in this sector are the USDA's Agricultural Marketing Service and Farm Service Agency (FSA), which purchase bulk foodstuffs through their commodity and dairy price support programs. Agricultural and dairy products bought through these programs are then channeled into a variety of federal domestic feeding initiatives, including the National School Lunch and Breakfast Programs, Supplemental Nutrition for Women, Infants, and Children (WIC), the Commodity Supplemental Food Program (CSFP), the Food Distribution Program on Indian Reservations (FDPIR), the Emergency Food Assistance Program (TEFAP), and the Disaster Assistance Program. They are also distributed to foreign countries through USAID, the World Food Program, private voluntary agencies, and bilateral government transfers. Agricultural commodities and processed foods are additionally purchased by the Federal Prison System and the Veterans Administration. Other agencies, such as the Federal Emergency Management Authority (FEMA) and US Immigration and Customs Enforcement (ICE) also purchase foodstuffs at smaller levels. In FY2013, the United States Government spent \$6.783 billion on subsistence (PSC 89%). Of this, \$2.484 billion was spent overseas, almost entirely by DLA and DeCA. Contracts greater than \$500,000 amounted to \$598 million. Many recurring overseas food contracts fell just below the \$500,000 threshold for EO scrutiny, with another \$314 million spent overseas on purchases in the \$480-500,000 range.

The FY2013 federal spend on subsistence by agency is reflected in the following chart:



²All federal procurement data is drawn from the [Federal Procurement Data System](http://www.fedprocurement.gov). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

Source: Federal Procurement Data System. <https://www.fpbs.gov/>

Food procurement by United States federal agencies is relatively consolidated, with most big purchases made through a fairly small number of major contractors. This is particularly true overseas, where a single Swiss company, Supreme Foodservice, provides 82 percent (\$2.03 billion in FY2013) of all food purchased by the US abroad. In the US, contracts from the Defense Commissary Agency in excess of \$1 million went to only ten companies in FY2013, with Tyson Fresh Meats leading the pack. Grains and other foodstuffs for the Farm Service Agency's commodity operations are sourced from similarly large agriculture corporations, including Cargill, Archer Daniels Midland, and Conagra Foods.

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Construction

This report covers labor on construction sites. For information on the human trafficking risks associated with particular construction materials, see the [Forestry](#) sector report and the forthcoming commodity reports: [Bricks](#), [Copper](#), [Granite and Other Stone](#), [Gravel and Crushed Stone](#), [Lead](#), [Steel](#), and [Titanium](#).

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☐ Long, complex, and/or non-transparent supply chains

Overview of the Construction Sector:

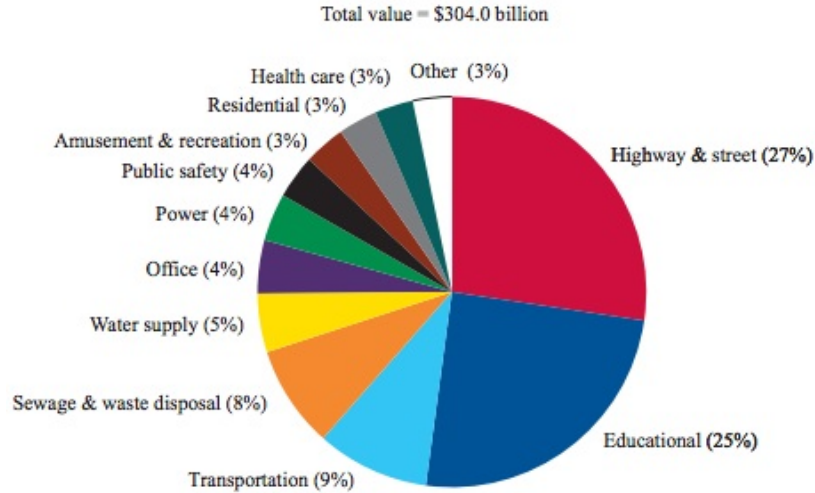
The construction sector covers a wide variety of economic activity, including the building, maintenance, demolition, renovation and repair of structures including houses, industrial facilities, airports, roads, bridges, and stadiums.¹³¹ Enterprises within the construction sector can include self-employed individuals, labor contractors, materials suppliers and international engineering firms.¹³² Wood, brick, nails and power tools are some of the many materials and tools used on construction sites.

Economy:

Construction is one of the largest industrial sectors in the world, and it accounts for more than 11 percent of global GDP.¹³³ Growth in this sector outpaces global GDP¹³⁴ and is among the fastest growing labor markets in developing countries.¹³⁵ A recent report published by Global Construction Perspectives and Oxford Economics predicted that by 2025, construction output would grow by more than 70 percent to \$15 trillion globally.¹³⁶ The same report found that countries expected to experience the most growth in this sector include China, India, Russia, Brazil, Poland, and the United States,¹³⁷ with China, India, and the United States accounting for almost 60 percent of global growth.¹³⁸ In 2010 China overtook the United States as the biggest construction market.¹³⁹ In Europe, it is forecasted that the construction market will shrink by five percent from 2007 to 2025.¹⁴⁰

In 2006 the construction sector accounted for nine percent of the United States GDP, with spending amounting to \$1.1 trillion.¹⁴¹ In 2010 the construction sector accounted for 3.5 percent of the total GDP in the United States. This reflects a decline in construction activity since a peak in 2006 when the industry contributed over five percent to national GDP. Total spending in 2010 amounted to \$804.6 billion, a 31 percent decrease from 2006. More money is spent on private construction than public construction, although private construction experienced a much more dramatic decrease in spending after 2006, while public construction only experienced a minor decline. Construction on highways and streets made up the largest share of public spending on construction, with construction of educational facilities making up the second largest.¹⁴²

Share of dollar value of public sector construction, by type, 2010



Source: CPWR – The Center for Construction Research and Training. *The Construction Chart Book*. 2013
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There were over 3.3 million construction firms in the United States in 2010. Approximately three-quarters of these enterprises were non-employer firms, owned and operated by one individual with no payroll, people likely working either as freelance individual contractors or reliant on subcontractors for additional labor. Of the construction establishments with multiple employees, about 80 percent employed less than 10 workers.¹⁴³ The low rate of directly-hired employees indicate that the use of temporary workers and day laborers is likely widespread in the industry.

Workforce:

The United States Bureau of Labor Statistics divides the construction sector into three subsectors: Construction of Buildings, Heavy and Civil Engineering Construction, and Specialty Trade Contractors. Construction laborers make up the largest occupation within the sector, with 667,680 employed in the United States as of 2013. In addition, 484,280 work as carpenters, 403,210 work as electricians, 208,870 work as operating engineers and other construction equipment operators, and 169,660 are employed as construction managers.¹⁴⁴ Construction laborers – as discussed below – tend to be at higher risk for trafficking and labor exploitation due to intersecting points of vulnerability: there are low barriers of entry to gain employment, the work is low-waged, laborers are disproportionately migrant workers, and the work is hazardous.

The most recent estimates from the United States Bureau of Labor Statistics drawing from surveys of business establishments show that 6,166,000 workers were employed in the construction sector as of December 2014.¹⁴⁵ Results from the 2013 Current Population Survey, which include individuals who are self-employed, show the number of people employed in the construction sector in the United States to be 9,271,000.¹⁴⁶ There are several reasons for the differences between these total employment numbers, potentially including the prevalence of self-employed laborers in the construction industry. Self-employed workers do not enjoy the same legal protections and job security as those employed directly by firms, making them more vulnerable to human trafficking and exploitation. The prevalence of self-employed workers, coupled with the high number of construction firms with very few employees on their payroll, is also evidence that many firms rely on temporary workers or day laborers.

According to the Current Population Survey, women account for 9.1 percent of the total construction workforce. Hispanic or Latino workers make up 25.5 percent of the construction workforce.¹⁴⁷

Risks to Human Trafficking in this Sector:

The United States Department of State's 2014 *Trafficking in Persons Report* noted evidence of human trafficking in the construction sector in the following countries: Angola, Aruba, Australia, Austria, Azerbaijan, Barbados, Belarus, Belgium, Benin, Brazil, Cameroon, Canada, Chile, Costa Rica, Cote d'Ivoire, Curacao, Cyprus, Czech Republic, Dominican Republic, Egypt, El Salvador, Eritrea, Equatorial Guinea, Estonia, Ethiopia, Finland, Georgia, Germany, Haiti, India, Iran, Iraq, Italy, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyz Republic (Kyrgyzstan), Laos, Libya, Luxembourg, Malaysia, Maldives, Mauritius, Mexico, Mongolia, Morocco, Namibia, Netherlands, Norway, Pakistan, Panama, Qatar, Russia, St Maarten, Seychelles, Slovakia, Slovenia, Somalia, South Sudan, Spain, Suriname, Sweden, Switzerland, Turkmenistan, Turkey, Ukraine, United Arab Emirates, United Kingdom, United States, Uzbekistan, Zambia, and Zimbabwe.¹⁴⁸

Hazardous/Undesirable Work:

The ILO defines construction as one of the most hazardous sectors for workers. Construction workers perform extremely physical work; typical tasks can include hauling heavy loads, stacking materials, using hand tools, and operating specialized equipment. Work is often performed outdoors and workers can be exposed to adverse weather conditions. Construction sites can be dangerous; laborers often work at heights and are exposed to dusts, vapor, asbestos, and other chemicals that may be harmful to their health and safety.¹⁴⁹

Every year at least 108,000 workers are killed on construction work sites worldwide. About 30 percent of all occupational fatal injuries occur in the construction sector. In developed countries, a construction worker is three to four times more likely to die on the job than workers in other sectors, while in developing countries, this likelihood increases to three to six times more likely.¹⁵⁰ According to the United States Bureau of Labor Statistics, 824 fatalities occurred in the construction sector in the United States in 2013.¹⁵¹ The four most common causes of death in the construction industry between the years of 1992 and 2010 were falls from heights, roadside incidents, contact with electric current, and being hit by an object. These types of incidents accounted for more than 65 percent of construction fatalities.¹⁵²

Numerous reports on the abuses of construction workers building facilities and stadiums for the 2022 World Cup in Qatar have highlighted the hazardous nature of the work. In fall 2013, the British newspaper the *Guardian* reported that Nepalese workers had died at the rate of almost one person a day during the previous summer, more than half from "heart attacks, heart failure or workplace accidents."¹⁵³ Human trafficking in construction for the World Cup in Qatar will be discussed in more detail below.

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

According to the ILO, construction is one of the primary sectors in which workers are highly vulnerable to human trafficking.¹⁵⁴ Because there are no formal training requirements for construction laborers, these low-skilled jobs are paid lower wages than more high-skilled construction sector jobs such as plumbers, electricians, and engineers.¹⁵⁵ These workers can be intimidated by the fact that should they express grievances, they can be quickly replaced.

Temporary or casual workers, including day-laborers, are a particularly vulnerable group. Incomes of temporary construction workers can be highly variable and seasonal. Temporary workers are "at-will" employees, and can be let go at any time, which discourages any expression of grievance. Economic insecurity may encourage them to accept poor working conditions such as forced overtime, abuse or harassment by supervisors. A report on day-laborers in North Carolina found that wage-theft is commonplace.¹⁵⁶

In some cases, trafficking in construction has been associated with state governments. The Burmese military, known as the *Tatmadaw*, has forced civilians, many of whom are ethnic minorities, to work on state infrastructure projects in Burma.¹⁵⁷ According to numerous reports, the *Tatmadaw* has forced local villagers throughout Burma to work on the construction of roads, bridges, military facilities, and other state infrastructure projects. In 2008, it was reported that the *Tatmadaw* utilized information collected on state registration documents on the number of habitants living in households to determine how many people from whom labor could be demanded. They then took people from their local villages under the threat of fines, and made them work without remuneration.¹⁵⁸ While reports of trafficking have decreased following the end of outright military rule and the creation of a forced labor complaint mechanism in cooperation with the ILO, cases continue to be reported, largely in the Karen state.¹⁵⁹

Children are involved in construction in countries including Guatemala, Haiti, Bhutan, Brazil, Somalia, Rwanda, and Honduras.¹⁶⁰ Because of the hazardous nature of tasks, children's participation in the construction sector is generally a worst form of child labor. Children in the construction sector are engaged in heights, carry heavy loads, and use dangerous machinery.

Migrant Workforce:

Migrant workers make up a significant proportion of the workforce on most construction sites and are particularly vulnerable to labor exploitation and human trafficking. Migrant workers often work informally and they suffer from the risks that many low-skilled migrant workers face, including low wages and the lack of social and/or legal protections. Lack of visa portability, confiscation of passports, and high recruitment fees are some of the numerous risks that make migrant construction workers highly vulnerable to human trafficking.

According to data published by the Pew Research Center, 22.6 percent of laborers in the construction sector in the United States are foreign-born, with more than half of those workers coming from Mexico. Other migrant construction workers are mostly from Central America, the Caribbean and Southeast Asia.¹⁶¹ According to a report published by the Workers Defense Project approximately 14 percent of construction workers in the United States are undocumented.¹⁶² This figure varies by region and task performed. Undocumented workers make up an estimated 30 percent of insulation workers, roofers and drywall installers. Local workers tend to hold managerial positions, while migrant workers make up a larger portion of those performing direct labor.¹⁶³ In a study that looked at labor trafficking among migrant laborers in San Diego, among all of the sectors studied, human trafficking violations and abusive labor practices were found to be most prevalent in the construction sector, at rates of 35 percent and 63 percent respectively.¹⁶⁴

Undocumented migrant workers in the United States, including construction workers, may also be indebted to smugglers. Day-labor construction positions working for subcontractors may be the only option these workers have to pay back their debt. This creates an environment rife with intimidation, as workers fear that raising any grievance will result in being blacklisted and unable to pay back debts. Workers who are delinquent in repaying their debt to smugglers – and the organized crime syndicates they may be associated with – risk violent retribution.¹⁶⁵

Migrant workers are at risk of trafficking in the construction sector throughout the world. Cases of human trafficking of migrant laborers in the construction sector have also been reported in Europe and South America.¹⁶⁶ The rapidly growing economies in the Middle East have led to construction and development of infrastructure that is largely dependent on short-term labor migration, mostly from Asia and Africa.¹⁶⁷

According to the Department of State's 2013 *Trafficking in Persons Report*, migrant workers from India, Bangladesh, Nepal, and Pakistan often pay extremely high recruitment fees to recruiters in order to get

jobs in the construction sector in Gulf countries. Upon arrival, workers find themselves in situations of debt bondage; working conditions are worse than they have been led to believe, but they have no choice but to work to repay their recruitment debt. Visa sponsorship systems in many of the Gulf States tie workers directly to their employers, meaning that if they wish to leave their employer they lose their legal status, leaving them vulnerable to retribution levied by governments that treat them as undocumented immigrants.¹⁶⁸

Construction for large special events often requires hurried recruitment of workers to meet deadlines. This can lead to quick recruitment – and subsequent exploitation – of migrant workers. Migrants from Serbia and Bosnia were recruited to work on construction for the 2014 winter Olympics in Sochi, Russia. Many workers reported that were promised a wage of EUR 1,500 monthly, but were instead paid EUR 250 for months of work. Because these workers had entered the country on 30 day tourist visas, they were considered illegal when their visas ran out.¹⁶⁹

Labor Abuse in Construction of Facilities for the World Cup

An investigation into the working conditions in Qatar during preparations for the 2022 World Cup has found evidence of severe abuse of migrant laborers and indicators of human trafficking. The investigation focused on Nepalese migrant workers on construction worksites in Qatar. In Qatar, more than 90 percent of workers are migrant laborers, 40 percent of whom are from Nepal. The workers are recruited to help build stadiums, roads, ports and hotels all for the upcoming World Cup.¹ Workers reported not having been paid for months, their wages withheld to stop them from running away. They reported that employers had confiscated their passports and failed to provide them with ID cards, leaving them without proper documentation and in a precarious legal status. Conditions on the worksites were dismal: workers were denied access to free drinking water and living conditions were described as “repulsive,” with sometimes 12 men sleeping in a room. Almost all migrant workers also had significant debts accrued during the recruitment process and reported paying extremely high interest rates, some as high as 36 percent.¹ As many as 1.5 million more laborers are expected to be recruited to help build facilities for the tournament.¹

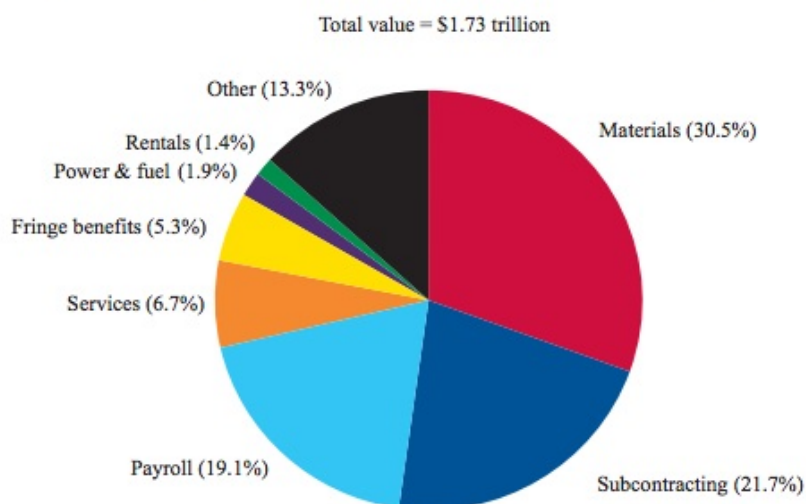
Migrant workers in Qatar work under the *kafala* sponsorship system, which has been widely criticized; the ILO Committee of Experts has stated that the *kafala* system “may be conducive to the exaction of forced labour.”¹ Under the *kafala* system, the migrant laborer is legally bound to their sponsor (*kafeel*). As a result their labor mobility is significantly restricted; the sponsor maintains the ability to dictate the recruitment process and working conditions and workers are unable to legally change employers without the permission of their sponsor.¹ In April 2014, the United Nations called for Qatar to abolish the *kafala* system.¹

Similar cases of extreme exploitation and human trafficking have been documented throughout the Middle East where the *kafala* system is in place, particularly in the UAE.¹

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in Labor Supply Chain:

Subcontracting accounted for 21.7 percent of the total value of business done by construction firms in the United States in 2007. This was the second largest expense category for construction firms after materials, which accounted for nearly 30.5 percent of the total value of business done.¹⁷⁰

Where construction dollar value goes, 2007 (Payroll establishments)

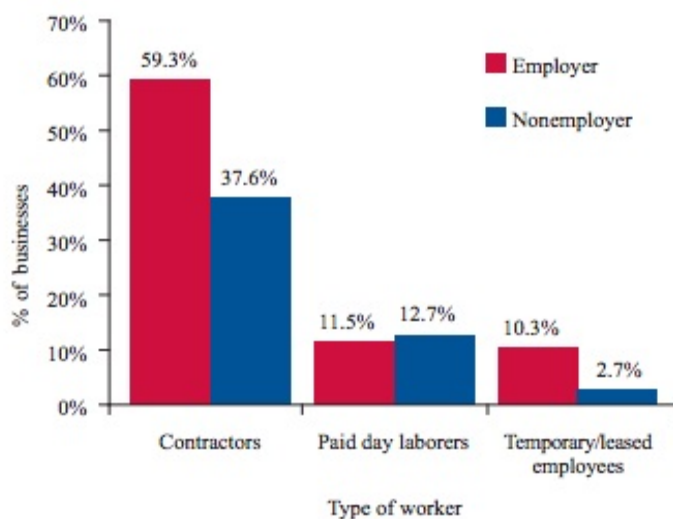


Source: CPWR – The Center for Construction Research and Training. *The Construction Chart Book*. 2013.
<http://www.cpwr.com/sites/default/files/publications/5th%20Edition%20Chart%20Book%20Final.pdf>

Work performed by subcontractors makes up a significant portion of the work produced in the construction sector. For example, 48 percent of the Nonresidential Building Construction work was done by subcontractors.¹⁷¹

Construction firms employ a variety of types of workers. In the United States the use of contractors, subcontractors, or third-party consultants is common among both employer firms (59.3 percent) and non-employer firms (nearly 37.6 percent).¹⁷²

Types of workers in construction businesses, employer vs. nonemployer, 2007



Source: CPWR – The Center for Construction Research and Training. *The Construction Chart Book*. 2013.

Labor practices in the construction sector are characterized by the widespread use of contractors and subcontractors to complete jobs. Production work is often subcontracted to specialty trade contractors that perform specialized tasks.¹⁷³ As discussed above, the majority of construction firms employ fewer than ten employees,¹⁷⁴ and approximately three million construction workers in the United States are self-employed.¹⁷⁵ This suggests many employment relationships in the construction industry are often informal, part-time or temporary. Instead of permanent workers, these sub-contracted firms often hire temporary workers, on a project-by-project basis. Because these workers are temporary, they often lack financial security, leaving them more likely to accept more dangerous conditions and worse conditions of work.¹⁷⁶

In a case filed in 2008, over 500 Indian migrant workers were reportedly trafficked into the United States to work repairing ships and offshore oil drilling rigs as part of the reconstruction following Hurricane Katrina. They were allegedly trafficked by a large company, Signal International LLC that used a network of recruiters and labor brokers. Workers allegedly paid extremely high recruitment fees – up to \$20,000 – and went into debt to pay recruiters for migration documents. Once workers arrived in the US their recruiters confiscated their identity documents. Workers were deceived about the living conditions provided by their employers, and instead slept 24 people in a trailer, housing that did not meet basic health and safety standards. Signal deducted money from each worker’s paycheck to pay for the degrading housing and “disgusting” food that was provided. Workers were also made to work under the threat of legal and physical harm. In 2007, after some workers met with attorneys to learn about their rights, Signal fired the workers and deported them in retaliation.¹⁷⁷

In another case in Germany, Romanian workers recruited through employment agencies were promised employment contracts with a German construction company. Upon arrival, they discovered that they were actually classified as independent contractors working on behalf of a larger construction company, but without any formal employment relationship. The migrant laborers worked for months without receiving any payment, and thus had no means to return home. The construction company denied any responsibility for the workers, as they were “independent contractors.”¹⁷⁸

Although human trafficking has been outlawed on United States military bases, as recently as March 2014, investigations found evidence that workers recruited by agents of third-party subcontractors were at risk of being trafficked (see the [Federal Procurement of Large Logistics Management Contracts](#) pullout box for more information).

Federal Procurement in the Construction Sector:³

Virtually all federal agencies engage in at least some construction. Federal building projects include construction and expansion or renovation of permanent facilities such as office buildings, schools, hospitals, airports, research facilities, prisons, embassies, and military bases, and also construction of temporary military and relief operation encampments. Many federal agencies undertake infrastructure construction projects like roads, bridges, dams, ports, canals, and airfields as well.

Construction procured overseas may also be embedded within umbrella logistics contracts, so totals for spending directly on construction contracts should be taken as a low estimate of total United States

³All federal procurement data is drawn from the [Federal Procurement Data System](#). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

spending in this sector (see the [Federal Procurement of Large Logistics Management Contracts](#) pullout box for more information).

In FY2013, the United States Government spent \$19.71 billion directly on construction contracts (PSC Y%). Of these, \$4.34 billion were performed overseas, nearly all of which (\$4.11 billion) were larger than \$500,000, making them subject to additional requirements under the EO, such as developing compliance plans. Large overseas contracts primarily went to major international construction companies such as Caddell Construction and Contrack International, although there is quite a lot of diversity in contractors even at that level. In the US, contracts were widely distributed throughout congressional districts, and typically awarded to local construction firms.

Supply of construction materials is often embedded within top-level construction contracts; there appears to be relatively little direct procurement of building supplies. In 2013, the Federal Spend included \$454 million in direct spending on prefabricated structures and scaffolding (PSC 54%), lumber (PSC 55%), and other building materials (PSC 56%). \$68 million was spent on the direct purchase of gravel, concrete, bricks, and stone (PSC 5610 and 5620), \$9 million of which was sourced from Afghanistan, a country listed by the United States Department of Labor as having forced labor and child labor in the brick industry.

¹³¹ International Labour Organization (ILO). *Construction: a hazardous work*. 2009.

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Electronics and Electrical Products Manufacturing

This report covers labor performed while manufacturing electronic and electrical products. For information on the human trafficking risks associated with the production of the materials used in electronics and electrical products, see the [Extractives/Mining and Basic Metal Production](#) sector report and the forthcoming commodity reports: [Aluminum](#), [Coltan, Tungsten and Tin](#), [Copper](#), [Gold](#), [Rare Earth Metals \(REMs\)](#), and [Titanium](#).

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☒ Long, complex, and/or non-transparent supply chains

Overview of the Electronics and Electrical Products Manufacturing Sector:

The United States Department of Labor's Bureau of Labor Statistics classifies the manufacture of electronics and electrical products into two subsectors: 1) Computer and Electronic Product Manufacturing, and 2) Electrical Equipment, Appliance, and Component Manufacturing. Products manufactured under the Computer and Electronic Product classification include computer and peripheral equipment; communications equipment; audio and video equipment; semiconductor and other electronic components; navigational, measuring, electromedical, and control instruments; and magnetic and optical media. Products manufactured under the Electrical Equipment, Appliance, and Component classification include electrical lighting equipment such as lamp bulbs and lighting fixtures; household appliances; electrical equipment such as electric motors, generators, transformers, and switchgear apparatuses; and other electrical equipment and components such as batteries, insulated wire, electrical outlets, fuse boxes, and light switches.

Electronic and electrical products are manufactured using a wide array of metals and minerals, including copper, aluminum, titanium, and gold. Plastics made from petroleum products and other chemicals are also used.

Economy:

The global electronics industry has been growing steadily, with a projected yearly growth rate of seven percent between 2013 and 2015.¹⁷⁹ Market growth continues to be strong in Europe and North America, although in recent years the Asia Pacific region has seen an increase in market demand as rising incomes fuel consumer spending on computers, phones, and appliances. Although many major brands continue to originate in the United States, Japan, and other developed countries, the actual production of most electronic and electrical products has increasingly shifted to developing and middle income countries, largely in Asia and Southeast Asia, as a result of a trend toward offshoring to lower labor costs and to gain other efficiencies. Since 2004, China has been the largest producer and largest exporter of electronic goods.¹⁸⁰

In recent years, electronics has been one of the fastest growing subsectors within the manufacturing sector in the United States, accounting for more than 15 percent of manufacturing GDP and ten percent of all employment in the overall manufacturing sector.¹⁸¹ United States exports of computer and electronics products increased 493 percent from 1983 to 2005.¹⁸² The computer and electronic sector was cited by the International Monetary Fund as one of the three main subsectors in the United States that is responsible

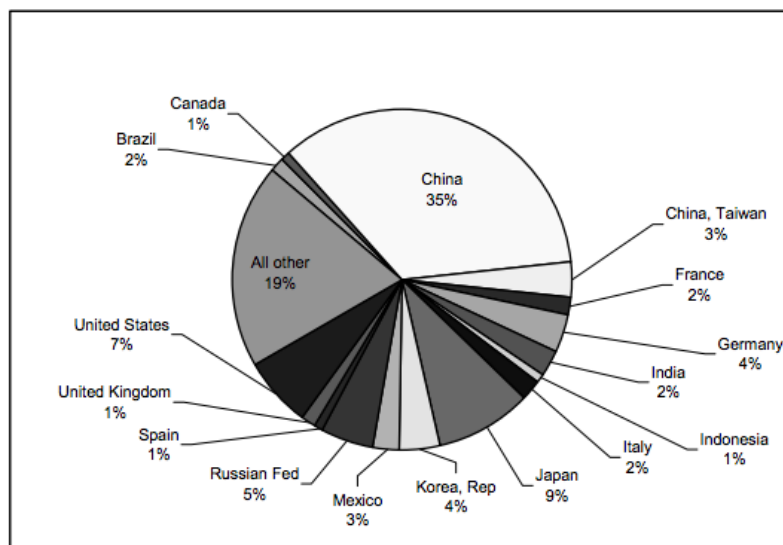
for the rebound in durable manufacturing after the recent economic crisis.¹⁸³ Nevertheless, the United States electronic sector has experienced significant deflation as rapid productivity gains and advances in innovation improve product quality and international competition drives down prices. Prices for computer and electronic goods have declined 92.3 percent in the 15 years leading up to 2010. Prices continue to decline at a rate of 16 percent each year.¹⁸⁴

Workforce:

Occupations in the Electronics and Electrical Goods manufacturing sub-sector include skilled positions such as appliance engineers, computer hardware engineers, and computer software engineers; semi-skilled positions, such as electrical and electronic engineering technicians, trouble-shooters, inspectors, and machine operators; and low-skilled jobs such as parts fabricators, surface treaters, assemblers, sorters, recyclers, packers, and loaders.¹⁸⁵

According to the United States Department of Labor Bureau of Statistics, 1,431,400 people were employed in this sector in the United States in December 2014.¹⁸⁶ During the 4th quarter of 2013, 18,846 private establishments were reportedly operating.¹⁸⁷ The electronics and electrical manufacturing sector is an increasingly globalized sector, employing approximately 18 million people worldwide.¹⁸⁸

Global distribution of employment in the electrical and electronic products manufacturing industries (2004)



Source: International Labour Organization (ILO). *The production of electronic components for the IT industries: Changing labour force requirements in a global economy*. April 16 2007.

http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/meetingdocument/wcms_161665.pdf

Data from 2004 show that while over 100 countries employed at least 100 workers in this sector, the top 50 countries employed 98.8 percent of all workers in this sector. Employment was largely concentrated in Asia, with a significant number of workers employed in China (35 percent), Japan (nine percent), Korean Republic (four percent), and Taiwan (three percent).¹⁸⁹ More recent data from the UN Commodities Trading database show that the top countries exporting electrical and electronics in 2013 were China, the United States, Germany, South Korea, Singapore, Japan, Mexico, and Malaysia.¹⁹⁰ High value-adding labor in this sector is concentrated in advanced economies, however, with brands such as Apple and Hewlett-Packard in the United States, Fujitsu, Hitachi, and Toshiba in Japan, and Ericsson, Nokia, Philips, and Siemens in Europe accounting for 70 percent of global value added in 2010.¹⁹¹ Lower value-

adding, labor-intensive aspects of production in this sector increasingly take place in less advanced economies with significant low-skilled workforces and lower labor costs, and it is in these contexts that the sector experiences heightened risk of human trafficking.

The low-skilled electronics and electrical goods workforce is dominated by women and migrants, both internal and international. The percentage of the electronics manufacturing workforce made up by women varies widely depending on the country, with a range of five to 87 percent.¹⁹² In Western Europe and North America, women account for 25-35 percent of the workforce, while the workforce in the emerging economies in Asia is generally more than 50 percent women.¹⁹³ In China, much electronics and electrical manufacturing is done by young women who migrate to urban areas temporarily to earn money before marriage.¹⁹⁴ In regional manufacturing hubs like Malaysia, many electronics workers are migrants from other poorer Southeast Asian countries like Nepal, Burma, Vietnam, and Indonesia.¹⁹⁵ Workers also flow in substantial numbers from China, South Asia, Southeast Asia, and sometimes Eastern Europe into manufacturing hubs like Singapore, Taiwan, and Japan.

Risks to Human Trafficking in this Sector:

Hazardous/Undesirable Work:

Low-skilled work in the electronics industry can be hazardous to the health of workers because of long working hours, risk of repetitive motion injuries, prolonged use of small-motor skills, exposure to extreme temperatures and hazardous chemicals, use of dangerous machinery, and, in some cases, heavy lifting.

The rapid development of new products and the short product life cycles of many popular goods in this sector mean that dramatic surges in demand are frequent occurrences. In an effort to meet urgent production deadlines, suppliers and factory managers often impose long hours on workers, sometimes in excess of legal overtime limits. There have been many accounts of managers forcing electronics workers to work overtime even when they do not wish to, and overtime hours are not always compensated at appropriately increased wage rates, a form of wage theft. Overtime work can increase worker fatigue, and consequently raise the likelihood of accidents in the workplace, as well as workers' vulnerability to illness.¹⁹⁶

Exposure to hazardous chemicals can be a particular risk for workers in the electronics and electrical manufacturing sector. Research shows that workers are not often provided with proper personal protection equipment in facilities where they are handling dangerous substances.¹⁹⁷ Exposure to hazardous chemicals can result in a variety of negative health effects including cancer, respiratory problems, skin irritation and rashes, and liver damage, among others. Because of the chemicals involved, workers involved in the manufacture of printed circuit boards are at extremely high risk of experiencing health problems.¹⁹⁸

The unpleasant and dangerous nature of low-skilled manufacturing labor in this sector is correlated with risk for human trafficking due to the fact that many workers often take on such jobs only because they lack other options or are forced to do so. Verité research has found that workers often pursue work in this sector because they have no viable alternatives for employment. For example, a worker from Nepal interviewed by Verité described seeking work at an electronics factory in Malaysia because he was unable to find stable employment in his home country. The worker paid extremely high recruitment fees and found that, upon arrival in Malaysia, the job was not what he had been promised by recruitment agents in Nepal.¹⁹⁹

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

Competitiveness in countries specializing in fabrication and assembly of electronics and electrical products is often derived principally from low labor costs. Because the work involved is generally low-skilled and does not require much training or investment in the workforce on the part of employers,

workers making electronics and electrical products are easily replaced. These workers have little leverage to negotiate for higher wages because there are always others waiting and eager to take their places. Such workers are vulnerable to furlough, lay-offs, and significant job insecurity. This insecurity is compounded by a very low rate of unionization among low-skilled workers in the sector, particularly in the electronics sub-sector.²⁰⁰ Worker vulnerability and lack of bargaining power is often further exacerbated by the fact that many electronics and electrical product manufacturing facilities are located within EPZs and FIZs. Workers in these zones are potentially at risk of labor violations because of lowered state scrutiny of labor practices.

Workers in this sector are generally lacking in marketable skills or alternative employment options, often both, and are frequently vulnerable to trafficking for structural reasons as well. Migrant workers are generally motivated to seek work abroad within the sector because poverty and a lack of job opportunities at home make even poorly-remunerated manufacturing jobs relatively desirable. Women workers may seek electronics or related factory work in order to amass resources for their dowries, to support their children or other dependents, or to achieve a measure of independence from male property-holders in the context of patriarchal societies.

Children are also sometimes pressed into labor within the electronics and electrical products manufacturing sector, with child and student labor being persistent problems particularly in China, where there have been many allegations of abuse of apprenticeship and vocational training programs. According to reports, use of child and student labor is one way that Chinese factories have managed surges in production, and many factories work directly with school administrators to recruit student labor.²⁰¹ These programs have long drawn criticism for employing underage workers and making them work long hours at jobs unrelated to their field of study. Allegations of forged documentation and frequent restrictions on students' freedom of movement are common.²⁰² In one notorious case, impoverished children were reportedly abducted and sent to Dongguan, China and distributed to factories across the Pearl River Delta. The Dongguan Fangmou Electronics Factory was found to have over 50 workers contracted by these recruiters.²⁰³ Child labor is also reportedly a common practice at Yonghong Electricons. Yonghong recruits underage workers through arrangements with their schools. In July 2006, many recruited workers were student apprentices at ages 14-15. Students are often sent to electronics factories believing that they will work for the duration of the summer in order to pay off the debts accumulated through their schooling. Although students send half their wages back to schools, wages are so low that it is extremely difficult to make enough to return to school and factory officials often refuse to approve an individual's request to resign.²⁰⁴

Prisoners represent another vulnerable population implicated in the manufacture of electronics and electrical products. Illegal prison labor has long been reported in countries with troubled human rights records such as China, but even in the United States, prisoners in both federal prisons and for-profit, private prisons are increasingly being used to manufacture electronic and electrical goods, in many cases on behalf of private United States-based companies, including prominent defense contractors like McDonnell Douglas/Boeing and General Dynamics/Lockheed Martin.²⁰⁵ While some forms of prison labor are permitted under international law, others are prohibited, and all prisoners are by nature vulnerable to trafficking by virtue of their inherent lack of freedom and other structural vulnerabilities (see the [Prison Labor in Federal Supply Chains](#) pullout box for more information).

Migrant Workforce:

As noted above, migrants, both internal and international, make up a significant proportion of the electronics and electrical goods manufacturing workforce in many countries. Migrants in this sector are at increased risk for trafficking for many reasons. Among the most prominent are the burden of debt that many migrants incur in the course of their recruitment and job placement, their vulnerability to being deceived about their job conditions or wages by unethical recruiters or employers, their frequent cultural

and linguistic dislocation and removal from social support networks, and the structural vulnerabilities they endure as a result of residency and immigration policies that restrict their freedom of movement and legal ability to change jobs. In some countries, foreign migrants may also have their passports and other identity documents taken from them by their brokers or employers, further restricting their freedom of movement. In a recent survey of over 500 electronics workers in Malaysia, Verité found rates of passport retention above 90 percent of those surveyed, a situation made particularly grave for foreign migrants in that country given the scrutiny of migrant workers by immigration officials, police, and a volunteer citizen security corps with the power to demand identification documents that workers do not have.²⁰⁶

In some countries, foreign electronics manufacturing workers may also be exploited or even trafficked as a result of legal frameworks within the receiving country that inadequately protect their basic rights as workers. In Japan, for example, a longstanding program to treat low-skilled foreign workers in electronics and other manufacturing sectors as trainees, rather than as temporary migrants, has prevented many foreign manufacturing workers from receiving the full basket of workplace protections and workers' rights that Japanese workers enjoy.²⁰⁷ Migrant workers also often face discrimination. A report published by Amnesty International in 2009, for example, found that migrant workers in South Korea working in an electronics factory were discriminated against and made to work longer hours than their Korean national peers.²⁰⁸

The level of human capital development and the existence of robust bilateral agreements between migrant-sending and migrant-receiving countries can both play a significant role in reducing the relative vulnerability of migrants in the electronics sector. Verité research has found that migrants from the Philippines who work in Malaysian electronics facilities, for example, tend to be better compensated and placed in higher level, more technical positions than do foreign workers from countries such as Burma or Indonesia.

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in the Labor Supply Chain:

Because of the dynamic nature of the electronics and electrical manufacturing sector and the frequent fluctuations in labor demand, particularly in the electronics sub-sector, recruitment agents and labor contractors are heavily involved in the supply of labor to this sector. In the United States, over 50 percent of the workforce in the electronics sector is provided by temporary agencies. In major manufacturing hubs for electronics overseas, it is also common for firms to rely on short-term contracts and temporary agencies for labor sourcing.²⁰⁹ In many cases, workers in this sector work in a factory, but are employed not by the factory but rather by an outsourcing agent.

In the course of ongoing auditing and research work in Malaysia, Verité has found that many migrant workers in electronics factories are employed directly by third-party employment agents. These labor intermediaries manage the full employment life cycle of migrants, from recruitment, hiring, and deployment, to management, compensation, and eventual repatriation of workers. As a consequence of such outsourcing arrangements, it is now possible to find multiple employers, including both the factory and various employment agents, in charge of different subsets of workers within the same electronics factory. Such an arrangement, while sanctioned by Malaysian law, acts to erode the essential protections and accountability inherent in an employer-employee relationship and in some cases even leaves workers confused as to the identity of their actual employer. Liability over violations of workers' rights is obscured, creating vulnerability on the part of the worker to exploitation and abuse, and constraining workers' access to legal recourse and grievance mechanisms.²¹⁰

Verité research on labor trafficking in the Malaysian electronics industry found many workers were unsure of their employment arrangement. Workers reported not knowing whether they were employed by an employment agent or directly by the factory.²¹¹

Even when workers are employed directly by manufacturing facilities and transparent employer-employee relationships are not undermined through outsourcing, the presence of middlemen in the process of recruiting and placing workers in low-level electronics and electrical sector manufacturing jobs increases workers' risk of being trafficked. Workers are often deceived by recruiters about the jobs they will be placed in, including about the nature of the work and the wages they will be paid, but also sometimes about the company they will be working for, or the region they will be working in.²¹² Such deceptive recruitment prevents workers from making informed decisions about the sacrifices they and their families are making in order for them to pursue the employment opportunity, and may result in workers ending up in work situations from which they have little possibility of escape.

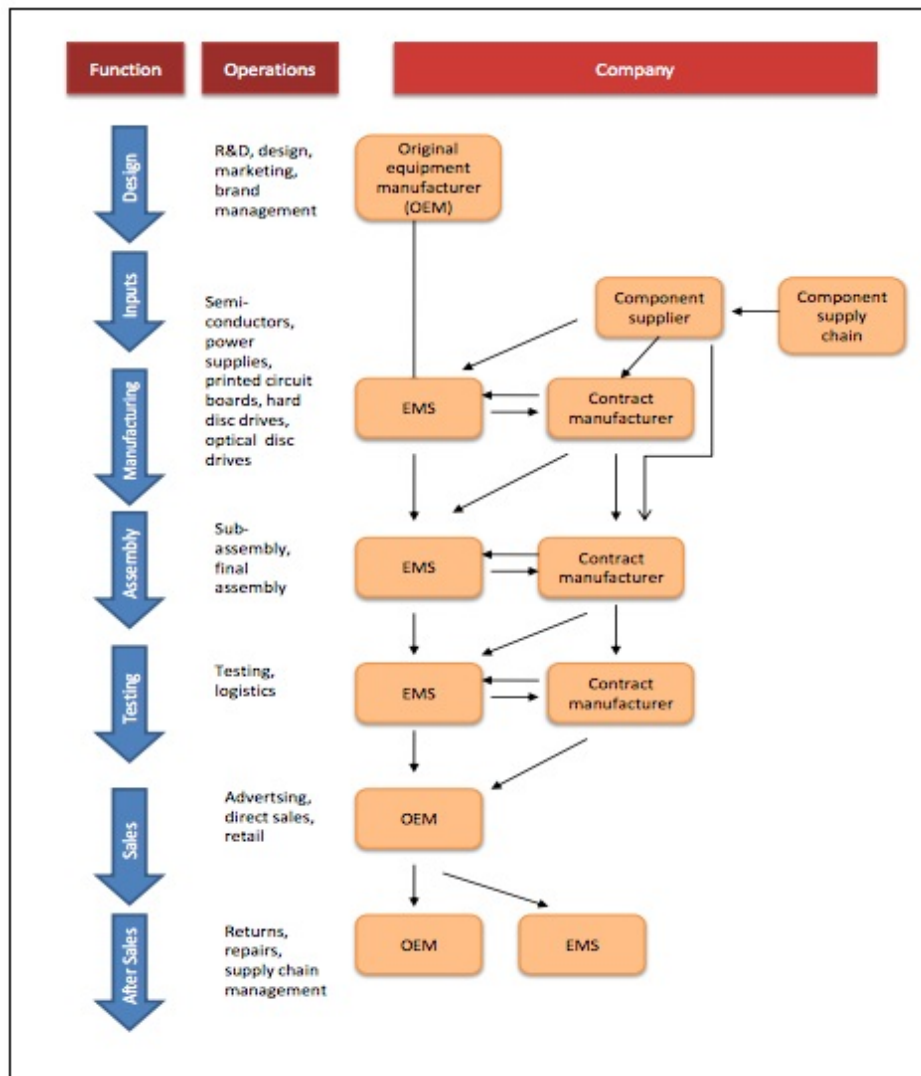
Debt bondage is also frequently correlated with recruitment in this sector, a consequence of workers borrowing to pay fees to recruiters to place them in their jobs, often incurring debts they have difficulty paying off, given the low wages that are typically paid to low-skilled laborers in electronics and electrical products manufacturing facilities. Verité research found that 92 percent of the more than 500 workers surveyed in the Malaysian electronics industry paid recruitment fees, and over 90 percent of these fees were excessive.²¹³ Verité research in the region found that the average recruitment fees paid by migrants working in Southeast Asia ranged between \$500 to \$1,200.

Long, Complex, and/or Non-Transparent Supply Chains:

The electronics manufacturing sector is a globalized industry made up of a vast network of companies and suppliers. The industry is extremely dynamic; development of new technologies is rapid, and new products are constantly being created. This requires that the industry be flexible and able to respond to fluctuations in market demand. In such a rapidly changing landscape, companies and suppliers commonly outsource services to other firms, preferring to perfect one part of the supply chain. Public-facing companies increasingly prioritize developing their brands and new products, and outsource production to an extensive web of suppliers.²¹⁴

Large, public-facing companies with well-known brand names are known as Original Equipment Manufacturers (OEMs).²¹⁵ They buy products from suppliers and manufacturers and sell the rebranded products under their own label to consumers around the world. While historically OEMs were the companies that made the products themselves, this term now refers to the company that buys the products and resells them with their logo attached. Often OEMs design the products, which are then made to order.²¹⁶ The suppliers who manufacture the products and sell them to OEMs are known as Contract Manufacturers (CMs) and Electronic Manufacturing Services (EMS). CM and EMS companies work with OEMs as well as Original Design Manufacturers (ODMs) and Original Brand Manufacturers (OBMs) to provide a range of manufacturing services.

Electronics manufacturing value chain – simplified



Source: Better Work, *Electronics Feasibility Study Executive Summary*, August 2010

<http://betterwork.com/global/wp-content/uploads/Better-Work-Electronics-Feasibility-Study-Executive-Summary.pdf>

The rapid pace of technology development in this sector, coupled with the constantly evolving product supply chain, leads to surges in demand and spikes in production. An extensive web of suppliers and companies allows for flexibility, although often this is at the expense of workers in manufacturing facilities. Fluctuating demands in production result in unstable demands in labor, which can have adverse affects on labor conditions. In times of high production, recruitment is often carried out quickly, sometimes even illegally, in order to speed up the process.²¹⁷ Increased work hours in order to meet deadlines can lead to compulsory overtime, and production lulls can result in the laying off of substantial numbers of workers. Layoffs may occur at any point in workers' contracts, sometimes even soon after they have just arrived, a situation that can leave workers with significant recruitment-related debt, and no jobs or way to earn the money needed to make debt payments or, in the case of migrants, even return to their home country.²¹⁸ The frequency of layoffs in the sector is exemplified by the fact that, even though employment numbers at Flextronics more than doubled between 2000 and 2005, 28,000 workers were also laid off during that time.²¹⁹

A recent case published in late 2013 highlights the job insecurity experienced by workers at Flextronics plants in Malaysia. The case details the experience of one of many Nepalese workers who lost their jobs working in a Malaysian Flextronics factory shortly after they arrived in the country. After paying multiple recruitment agents in order to get their jobs, many workers were still in debt when production stopped and they lost their jobs. Even the additional wages Flextronics paid them in compensation were not nearly enough for most workers to pay off the debt they had incurred getting their jobs in the first place. Housed in employer-provided dormitories, workers waited for months for word on when they would return home. Many fell out of legal immigration status as Flextronics failed to renew their visas and work permits.²²⁰ This case illustrates one of the ways that production surges and market fluctuations impact workers in this sector. While the complex and flexible supply chain of electronics manufacturing plays a big role in the sector's profitability, it can also result in increased vulnerability to exploitation and trafficking for electronics workers, particularly for those in low-skilled, low-wage positions within the sector.

The number of inputs in the supply chain of any given electronics product is vast, with major component parts each possessing their own supply chains. Primary inputs come from raw materials supply chains for metals, plastics, and chemical compounds around the world. These inputs make their way to manufacturing facilities for electronics and electrical components, which are often produced in industry manufacturing hubs in Asia and Southeast Asia such as China, Taiwan, and Malaysia. Components are then assembled – often in different facilities or even countries – into finished products, which are finally distributed to wholesalers and retailers around the world. The supply chain in the sector is therefore not strictly hierarchical, but in many cases more accurately described as reciprocal, with some companies acting as both customers to some suppliers – buying parts and components that they assemble into an end product – and as suppliers to other companies, depending on where in the supply chain the product they produce is located.²²¹ Because production in the sector is so globalized, it relies heavily on inputs from the transportation section (see the [Transportation and Warehousing](#) sector report for more information) and other supporting service sector industries as well.

The complexity of supply chains in this sector makes scrutiny of the labor practices throughout the totality of a product's production cycle quite difficult. Even when a particular facility within the chain implements safeguards against trafficking or other labor abuses in its own management practices, trafficking may occur in the course of sourcing labor for the facility, or in the labor practices involved in production of the inputs on which it relies, or in the supply chain into which its own products feed.

Federal Procurement in the Electronics and Electrical Products Manufacturing Sector:⁴

Because subcontracts for inputs are not tracked in the Federal Procurement Data System, federal spending in the electronics sector is not possible to isolate, but electronics are deeply implicated in many kinds of products and contracts, and purchased by virtually all agencies of the US Government.

Federal expenditure in this sector may be assumed to be dominated by the agencies of the Departments of Defense and Energy, for weapons systems and other high-tech hardware with significant electronics components. Such purchases include aircraft, ships, guided missile systems, tanks, trucks, cars, and navigation and surveillance equipment of all kinds. Information technology such as computers, networks and servers are procured by agencies as diverse as the Internal Revenue Service, Immigration and Customs Enforcement, National Laboratories, and USAID. Telephones and phone networks and other

⁴All federal procurement data is drawn from the [Federal Procurement Data System](#). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

communications hardware are also procured by virtually all federal agencies. Medical and laboratory equipment with significant electronics content is also purchased by many federal agencies. Direct purchases of computers and related advanced data processing (ADP) equipment (PSC 70%, excluding software (PSC 7030) accounted for \$5.31 billion of the federal spend in FY2013. As noted, however, such direct computer purchases do not capture electronics inputs to prime contracts for complex hardware purchases.

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¹⁸⁰ Better Work, *Electronics Feasibility Study Executive Summary*, August 2010

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¹⁸⁴ The Manufacturing Institute, Manufacturers Alliance for Productivity and Innovation, National Association of Manufacturers. *Facts About Manufacturing*. November 2012

http://www.manufacturingfacts.org/2012_facts_about_modern_manufacturing.pdf

¹⁸⁵ US Department of Labor, Bureau of Statistics. *Industries at a Glance: Computer and Electronic Product Manufacturing* <http://www.bls.gov/iag/tgs/iag334.htm>

US Department of Labor, Bureau of Statistics. *Industries at a Glance: Electrical Equipment, Appliance, and Component Manufacturing*

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Extractives/Mining and Basic Metal Production

This report covers the labor in the extraction of minerals and other geological materials from the earth as well as the processing of these materials. For more information on the human trafficking risks associated with the extraction and processing of specific minerals and metals, see the forthcoming commodity reports: [Aluminum](#), [Charcoal](#), [Coal](#), [Coltan](#), [Tungsten and Tin](#), [Copper](#), [Diamonds](#), [Gold](#), [Granite and Other Stone](#), [Gravel and Crushed Stones](#), [Jewels](#), [Lead](#), [Rare Earth Metals](#), [Silver](#), [Steel](#), [Titanium](#), and [Zinc](#).

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☒ Long, complex, and/or non-transparent supply chains

Overview of the Extractives/Mining and Basic Metal Production Sector:

Extractives refer to the extraction of minerals and other geological materials from the earth. This report will mostly cover the process of removing materials from earth, but will also draw attention to processing where relevant. The minerals and mineral products produced through mining are critical to a variety of sectors including technology, electronics, jewelry, construction, and manufacturing.

The United States Bureau of Labor Statistics groups mining operations into the following broad categories: oil and gas extraction, mining except oil and gas (including coal mining, metal ore mining, nonmetallic mineral mining and quarrying), and support activities for mining. Support activities may include mineral cleaning, stone cutting and crushing, water carrying, transport, driving, shaft digging, drilling, welding, carpentry, mechanics, and driving.²²² In mining camps in remote areas, high numbers of migrant (whether domestic or international) workers and mine owners drive demand for domestic services such as cooking and cleaning, and often illicit activities such as petroleum and drug trafficking and prostitution.

Economy and Workforce: Minerals, Metals, and Stones:

Mining is carried out in almost every country in the world and plays an important role in many economies, both of extremely rich and developing countries.²²³ Mining and the use of mined products in industry drive an estimated 45 percent of global GDP.²²⁴ According to the International Council on Mining and Metals, the value of world mineral production increased over 400 percent between 2002 and 2010. This increase was driven by the emerging economies of China and India, as well as by rising commodity prices.²²⁵ Of the approximately 40 countries depending on non-fuel minerals for over 25 percent of their exports, 75 percent are low and middle income countries. Half of the countries that are mineral reliant are in Africa.²²⁶ Many mineral reliant countries rank low on the Human Development Index,²²⁷ suggesting that workers in those regions may be particularly vulnerable to exploitation.²²⁸

Globally, minerals and metals are generally mined either through hard-rock or alluvial mining. In hard-rock mining, minerals and metals are extracted from rock, which can be done in large open-pit mining or in tunnels that are dug into rock faces. In alluvial mining, minerals and metals are extracted from water. This can be done through panning in rivers; sluicing, in which water is combined with materials (such as sand and dirt) and is channeled into boxes that sift and separate the minerals and metals from the

material; and dredging, in which minerals and metal-laced sediment is sucked up from sediment in bodies of water.²²⁹

Mineral extraction is carried out by large-scale commercial mines and by small-scale artisanal mines. In general, large-scale commercial mines overseen by national or multi-national companies have relatively lower risks of trafficking. According to the World Bank, these mines produce about 95 percent of world's minerals, including fuel, and employ 2.5 million people world-wide. There are a relatively small number of large mining companies, whose headquarters are concentrated in the US, South Africa, Australia, and Canada.²³⁰

Artisanal small-scale mining (ASM) refers to mining with simple, usually non-mechanized means of extraction that is typically highly labor intensive.²³¹ ASM is usually conducted by individuals or small groups of people, although it may include larger partnerships or cooperatives.²³² ASM provides approximately 15 percent of the world's non-fuel minerals and provides income for an estimated 80-100 million men, women and children.²³³ ASM activities are usually informal and may be illegal or unregulated. There are five primary types of artisanal mining as described by the International Council on Mining and Minerals and the International Finance Corporation:

- Traditional ASM occurs where local people have been mining for a long period of time, possibly generations. Mineral rights may be passed down within families and mining is often the primary source of livelihood.
- Seasonal ASM provides secondary livelihood support to families during “off-peak” agricultural seasons.
- Permanent co-habitation refers to ASM miners “squatting” around the edges of large scale legal concessions, and may have a contentious relationship with the multi-national concession holders. These miners may be local or may migrate to the area.
- Shock ASM is driven by catastrophes such as drought, economic depression, armed conflict, the closure of formal mines, or other sudden factors leaving large groups of people without livelihood options.
- Influx ASM is driven by “booms” or discoveries of new mineral deposits. These booms can cause large groups of people to appear at mining sites in a short period of time.²³⁴

While medium-sized and large-scale mines generally operate legally and are thus considered formal, much of the ASM mining is considered informal or illegal. For example, for mines to be considered legal/formal in Peru, they must have a title to the concession or an agreement with the concession owner, authorization to work the land, an approved environmental impact study, water rights, a certificate of non-existence of archaeological artifacts, authorization to carry out exploration and/or processing activities, and accreditation as a small-scale or artisanal miner, among others.²³⁵ Mines that fail to meet these requirements or that operate in environmentally protected areas are considered illegal. In Bolivia, children work mining zinc and tin in abandoned commercial mines. Because the mining is illegal, they work in more remote and dangerous regions of the mine to avoid detection by guards.²³⁶ The combination of highly labor intensive work and low levels of regulation and oversight in illegal mining creates increased risk of trafficking for workers in the sector.

Minerals and metals are used in a huge number of supply chains including construction, aerospace, automobiles, ships, electronics, durable consumer goods, makeup, jewelry, manufacturing, packaging, and currency. Stone materials extracted via quarrying, including coal, limestone, granite, marble, slate, gravel, sand, and clay, are primarily used in construction. Gemstones are used in jewelry and for industrial purposes.

Economy and Workforce: Oil and Gas:

While no official numbers are kept, energy use in 2008 was estimated at 11.29 billion tons, with global energy expenditures at approximately \$4.969 trillion.²³⁷ The United States Federal Government spend on oil and gas was \$14.379 billion in FY2013. Large quantities of oil and gas flow daily from "exporting" regions such as the Middle East, Africa, and Latin America to "importing" regions such as North America, Europe, and East Asia.

Petroleum, which is extracted from the earth via drilled wells, provides about 60 percent of the world's energy needs, and is also used for petrochemicals. As much of the world's petroleum supply is underwater, oil rigs (also known as oil platforms) are used to extract, process, and store oil before it is brought to shore for refining. Oil is transported through pipelines onshore.

Gas, including natural gas and shale gas, are also produced by drilling. Gas is used for electricity generation, transportation, and fertilizers.

Jobs in the oil and gas sectors range from low-skilled to extremely high-skilled labor. This report will cover workers involved directly in extraction or directly supporting extraction activities as well as pipeline construction, as these tend to be either relatively lower-skilled jobs and/or jobs performed by migrant workers. Some specific jobs related to extraction and construction in the oil and gas industry include: drill/machinery operators, carpenters, welders, pipe layers, mechanics, maintenance/repair workers, solderers, brazers, machine operators, and transportation drivers. For more information on drivers, see the [Transportation and Warehousing](#) sector report.

Risks to Human Trafficking in this Sector:

The United States Department of State's 2014 *Trafficking in Persons Report* noted evidence of human trafficking in the extractives/mining and metal production sector in the following countries: Angola, Bolivia, Brazil, Cameroon, Chile, Colombia, Cote d'Ivoire, Democratic Republic of the Congo, Ghana, Guyana, Indonesia, Madagascar, Mali, Mongolia, Nigeria, North Korea Pakistan, Panama, Papua New Guinea, Peru,²³⁸ Senegal, Sierra Leone, Solomon Islands, Sudan, Uganda, Vietnam, Zambia, and Zimbabwe.

Hazardous/Undesirable Work

Mining is a highly hazardous sector. Hazards facing miners include working in spaces without light or ventilation, falling rocks, lack of personal protective equipment, mine collapse, lung disease, repetitive stress injuries, chemical exposure, explosions, fire, electrocution, heavy equipment, carrying heavy loads, working at heights, exposure to extreme heat and noise, chemical vapors, and exposure to radiation.²³⁹ Children and juveniles working in mining are particularly vulnerable to these hazards. Workers who live in isolated mining camps are at increased risk for infectious diseases such as tuberculosis, hepatitis and HIV.²⁴⁰

Artisanal mining is particularly hazardous due to its unregulated nature. Most miners in small scale mining are working on a subsistence level and without the backing of any larger organization. This leaves them without access to protective equipment or to safety training. Where regulations do exist, they may be created for the context of large commercial mines and, according to the International Institute for Environment and Development, "exaggerated safety requirements tend to discourage small-scale miners, inspiring them to simply ignore all safety advice."²⁴¹

According to the ILO, children, as well as adults, are exposed to a variety of dangers in artisanal mining, which it considered one of the activities that presented the greatest danger to children's physical and mental development. One of the many health and safety risks is loud noises created by perforation, explosions, grinding, and pumping. Vibration produces a risk to children's muscular and skeletal development. Exposure to sunlight for long periods of time puts both adults and children at risk to skin

damage, dehydration, and severe sun burns that can result in death and cancer. Miners can also be exposed to extreme cold, putting them at risk of hypothermia and frostbite.²⁴²

Accidents are common in artisanal mining, due to the fact that the ASM is carried out without the benefit of modern technology or personal protective equipment (PPE) and often occurs outside of the purview of the law.²⁴³ Additionally, precisely because illegal mines operate outside of the law, workers lack social security and health insurance and accidents are rarely reported. Therefore, many workers and their families receive no compensation if workers are injured or killed on the job. Workers interviewed by Verité in Peru reported a large number of fatal accidents in illegal gold mines, with some workers being buried in unmarked graves without any information or compensation being provided to their family members.²⁴⁴

Finally, exposure to cyanide and mercury used in gold processing presents a grave danger to workers and self-employed miners. Verité research in Peru indicates that in some formal processing plants, workers are also exposed to cyanide with minimal PPE and many workers are exposed to mercury with little to no PPE in illegal gold mining.²⁴⁵ Mercury may be ingested (accidentally during work or when it contaminates water), absorbed through the skin (when it is handled with bare hands or miners have to swim in mercury contaminated water), or inhaled (when the mercury is burnt off of pieces of gold). This can result in inflammation of vital organs, the inability to urinate, shock, and death. It can also result in skin lesions, irritation to the lungs, difficulty breathing, and permanent damage to the nervous system.²⁴⁶ Because mercury is neurotoxin, it is particularly harmful to children. Human Rights Watch found children as young as six exposed to mercury in gold mining in West Africa.²⁴⁷

Oil and gas extraction are considered highly hazardous. In the United States, oil and gas workers were killed at a rate over seven times higher than the average rate, between 2003 and 2010.²⁴⁸ Hazards include vehicle accidents, being struck by machinery, explosions and fires, falls, being trapped in small spaces and chemical exposure. In the oil and gas sector, illegal drilling and siphoning also occur. Health and safety risks are especially prevalent in these unregulated activities.

Workers are also vulnerable to the volatility of their host country and can face risks such as kidnapping and armed conflict. In 2013, migrant workers off the coast of Nigeria were kidnapped by armed gunmen.²⁴⁹ Foreign workers in South Sudan were evacuated in 2014 due to fighting between the army and rebel leaders.

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce

Several minerals – most notably gold, cassiterite (for tin), wolframite (for tungsten), and coltan (for tantalite) from the Democratic Republic of Congo (DRC) as well as diamonds from Angola, Zimbabwe, Central African Republic, and Sierra Leone – are closely tied to armed conflicts.²⁵⁰ In addition to armed conflicts, organized crime syndicates may also control mines in some areas, such as control of Mexican iron ore mines by the Knights Templar cartel in the state of Michoacan.²⁵¹ This is also the case in Colombia, where the vast majority of illegal mining is controlled by guerrilla groups, such as the *Fuerzas Armadas Revolucionarias de Colombia* (FARC) and narco-traffickers and other criminal groups, such as the Rastrojos and Urabeños. In fact, according to one source, the revenue generated from illegal gold mining has surpassed the revenue generated from cocaine trafficking in Colombia. This revenue funds these groups and fuels the continued armed conflict in Colombia.²⁵²

Much of recent attention to conflict minerals has focused on the DRC, where parties to the ongoing war, including the army as well as rebel groups, take control of mining sites. Revenue from these minerals provides armed groups financial resources for their operation.²⁵³ These parties may require local independent miners to work without pay at their mining site. Workers may be forced to mine through induced indebtedness or under direct threat of violence. Further, the armed groups have carried out human

rights atrocities against local populations including “widespread killings of unarmed civilians, rape, torture and looting, recruitment of child soldiers to fight in their ranks, and forced displacement of hundreds of thousands of people.”²⁵⁴

In India, trafficking in quarrying and stone cutting/crushing activities is tied to the caste system. People belonging to “lower” castes, dalits, and indigenous people are trapped in cycles of debt bondage. Many borrow money from quarry owners to cover basic expenses that they cannot afford with their meager pay. Children may also be required to work to pay their family’s debt.²⁵⁵

Mining activities are concentrated in remote areas, which leads to a high degree of isolation of workers, whether domestic or migrant, who may be physically unable to escape. Further, particularly in weak states, governments lack the ability to monitor conditions and enforce laws. Migrant workers living in makeshift mining camps create high demand for labor in attendant areas such as cooking and cleaning, as well as in illicit activities such as drug trafficking and prostitution.²⁵⁶ These tasks carry high levels of hazards and risks of human trafficking.

Mining activities often represent one of the only viable livelihood opportunities in a region, leaving workers with no alternatives even if they are facing exploitation. In unregulated coal mines in Turkey, for example, where a large number of children working in hazardous labor were identified, locals pressured mining companies to keep the mines open as local residents felt they lacked other employment options.²⁵⁷

In some cases, the mines themselves contribute to destruction of other livelihood opportunities. Mining activities are highly detrimental to surrounding environments, causing desertification²⁵⁸ and producing large amounts of waste. These environmental impacts can negatively affect the ability of local people to carry out traditional livelihood activities such as agriculture and fishing, thus greatly increasing their overall vulnerability to human trafficking in mining as well as in other sectors.²⁵⁹

Further, in some contexts, because of its highly unregulated nature, illegal mining can provide employment opportunities to marginalized groups who face discrimination or other barriers to working in the formal sector. In the Peruvian gold sector, Verité identified a number of “*indocumentados*,” Peruvians who lack a National Identity Document (DNI). For many *indocumentados*, the illegal mining sector constitutes their only chance for employment, as formal sector employers require that their workers possess a DNI. In some cases, they are extremely poor, geographically isolated, or indigenous Peruvians who never obtained a birth certificate and have thus been unable to acquire a DNI. These individuals are generally very vulnerable due to their lack of alternative employment and their low levels of education and socio-economic status. In other cases, the *indocumentados* are criminals or people suspected of having committed a crime who are running from the law and seek refuge in the lawless environment of the mining camps. *Indocumentados* reported feeling vulnerable to denunciation to authorities.²⁶⁰

In Ghana, although the gold sector is booming, many Ghanaians have difficulty securing employment in the formal sector, and therefore turn out of necessity to the informal sector. The miners do not have access to capital to purchase equipment and often take out high interest loans. Typically, they are forced to repay these loans by selling their gold back at rates well below the market value. This cycle of debt and low earnings has induced many to use forced, child, or other exploitative labor.²⁶¹

Children and adolescents – a highly vulnerable demographic group – are active in many types of mining, particularly in the ASM sector. The ILO notes that about 20 percent of children engaged in artisanal mining work for adults who are not their parents – leaving them vulnerable to economic exploitation.²⁶² Children enter the sector both voluntarily and through trafficking. In many cases, children work alongside family members to supplement family income. Some children, particularly older juveniles, may migrate to mining areas to seek economic opportunity. For example, in Burkina Faso and Mali, children are

leaving school at a high rate to work in artisanal gold mining in an attempt to support themselves and their families.²⁶³ However, once on-site, these children are vulnerable to exploitation and human trafficking.²⁶⁴ Other children have been forced to work in mines through a recruiter; recruitment often occurs through informal networks of extended families and acquaintances.²⁶⁵ Children in Nigeria are also forced to work in granite and quarrying,²⁶⁶ and there have been incidences in which children were sold to traffickers by their parents.²⁶⁷

Regardless of how children enter the mining sector, due to the extremely hazardous nature of the work, mining is nearly always considered a Worst Form of Child Labor (WFCL). Children are commonly used to enter narrow mine shafts that adults can not fit down.²⁶⁸ In gold mining, children are also often tasked with cleaning the gold using mercury, a highly toxic substance.²⁶⁹ Children are also heavily employed under hazardous conditions in the cutting and polishing of gemstones.²⁷⁰ The isolated nature of mining means that many children abandon their education, another indicator of the WFCL.

Women are much more likely to be involved in ASM than in large-scale commercial mining. In countries such as Mali, Madagascar, Guinea and Zimbabwe, over 50 percent of those involved in mining activities are women.²⁷¹ A study among female ASM miners in Tanzania found that women were motivated to work in ASM mining as a means of supporting their family's survival, particularly when traditional subsistence farming was no longer supporting their family due to drought, low agricultural commodity prices, or lack of access to farmlands.²⁷² Although women are less likely to participate directly in shaft mining, women and girls are often involved in panning and attendant activities and sectors such as mineral cleaning, trading, and domestic activities such as cooking, cleaning, and fetching firewood in mining camps. Where women work as part of a family unit, income derived from her work may be directly controlled by her husband or other men in her family, leaving her uncompensated for her work.²⁷³

Women are also involved in prostitution around mining camps, many of whom have been trafficked. Verité research on gold mining in Peru found that among those interviewed, nearly all women and girls involved in prostitution had been trafficked, with indicators including deception, debt bondage, kidnapping, confiscation of identity documents, and violence. Women hired as cooks are also often forced to provide "sexual favors" to miners.²⁷⁴

In countries with repressive governments, the high economic value of oil and gas can incite regimes to conscript citizens in the oil and gas sector. Under Burma's former military regime, the soldiers who had provided security on behalf of a French oil company reportedly forced villagers to work in construction on and around an oil and gas pipeline.²⁷⁵

Migrant Workforce

In addition to local workers, both domestic and international migrants are involved in mining activities in some regions. The isolated nature of mining means that in some areas, nearly all workers must migrate from their home regions to reach mining camps. In countries lacking alternative livelihood options or during surges in mineral or metal prices, a "rush" can emerge around mining activities, particularly artisanal mining which has lower barriers to entry.²⁷⁶ Migration may take place rapidly, over a longer period of time, or seasonally.²⁷⁷

In the Kedougou region of Senegal, for example, villagers who cannot support their families through agriculture or have lost their land to logging have turned to gold mining as a necessity. They are joined by international migrants from neighboring countries of Mali, Guinea, Gambia, Ghana, Burkina Faso, Togo, and Nigeria. In many cases, migrant workers in the mining sector include children and juveniles, either travelling with their families or independently (for a further discussion of child labor, see *Vulnerable, Easily Replaced, and/or Low-Skilled Workforce*).²⁷⁸ There have also been reports of the trafficking of Chinese and Indian migrants into mining in other African countries.

In Peru, Verité research found that large number of workers migrated internally from impoverished rural and urban areas to illegal gold mines, both in the highlands and the Amazon region. There were also some reports of Ecuador immigrants being trafficked by armed Chinese gangs who held them captive and forced them to work in illegal gold mines. Migrant workers were trafficked through deception about conditions of work, debt linked to recruitment and transportation, withholding of wages, and threats and isolation.²⁷⁹

In the oil and gas industry, oil booms often drive demand for workers, and if companies are unable to fully staff their operations using domestic workers, they may need to turn to foreign workers who are often hired quickly.

Although most jobs in the oil and gas sectors are high-skilled labor, foreign workers may be paid considerably less than their domestic counterparts, as is the case with foreign workers from Mexico, Ireland, Portugal, and Italy in Canadian oil sand fields. These workers were brought in to replace unionized domestic workers, and were recruited through labor intermediaries.²⁸⁰ There have also been reports of the trafficking of Filipino and Indian migrants into the oil sector in the US. Migrant workers, primarily from South Asia, are employed on oil rigs in several regions including Gulf States, off the shores of New Zealand and Australia, and off the coast of West Africa.²⁸¹ In 2013, oil workers in Gabon went on strike to protest the rampant use of undocumented foreign workers who were paid low wages.²⁸²

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in the Labor Supply Chain: In some mining contexts, workers flock willingly to mining sites drawn by the perceived livelihood opportunity. In other contexts, where conditions are especially hazardous or otherwise undesirable, deception may be prevalent in worker recruitment. Verité research in the gold sector in Peru found that domestic workers are recruited in their hometowns via recruitment offices where intermediaries seek brokers. Workers are given advances of money, clothing, tools and transport, which many workers are led to believe are gifts and do not realize they will have to pay back. The recruiters describe the opportunity for workers to strike it rich and are provided with little to no accurate information of the conditions of their employment, including, often, the length of their contract. Many workers are then told that they have to work for three months before they can leave the mines and are prevented from doing so by recruitment-linked debt, physical isolation, and threats. Some workers are sold to another person by family members, who receive a payment for recruiting them, and are then told that they are required to work off this fee.²⁸³

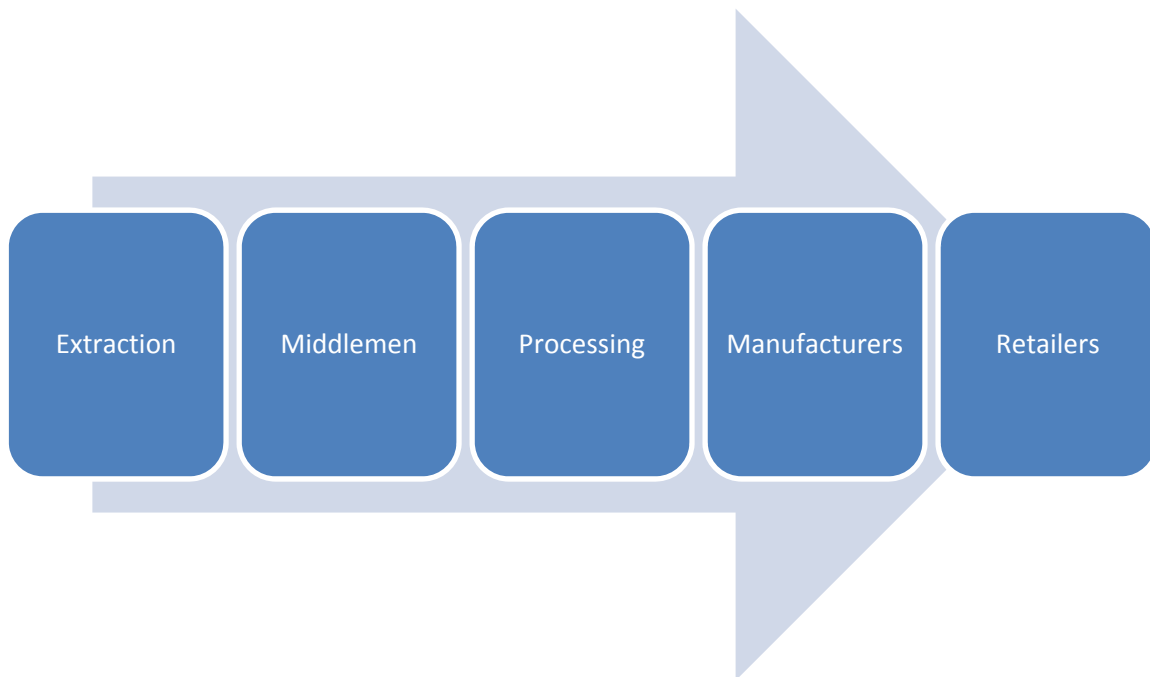
Although seemingly less common, recruitment in the minerals and stones sector can also occur in a transnational context. The United States Department of State reports that in Zambia, Chinese and Indian men are recruited to work in Chinese-owned mines in Zambia's Copperbelt where they are held in conditions conducive to human trafficking.²⁸⁴ In the Ghanaian gold sector, Chinese workers were apparently trafficked to work in illegal ASM gold mines. Traffickers provided fraudulent work visas to work on construction projects. Upon arrival, the workers' passports were seized, and the workers were required to pay off their travel and visa debts.²⁸⁵

Oil rigs and oil fields in the United States employ migrant workers on H-2B visas and there are several alleged cases of human trafficking. These workers are recruited through labor contractors, who deceive workers in the recruitment stage, making unrealistic promises about wages and immigration status. For example, in 2006, Indian metal workers were trafficked into Louisiana to rebuild oil rigs destroyed by Hurricane Katrina. One worker reported paying his recruiter \$20,000 to secure his job, and said he was promised permanent residency in the United States. Instead, he faced poor living conditions and hazardous working conditions.²⁸⁶ Filipino workers, some of whom died in an explosion, were forced to work in oil fields in Texas in 2012.²⁸⁷ These workers were recruited through a labor agency in the Philippines tied to a receiving country agency in Louisiana.²⁸⁸ The labor recruiters promised high wages,

but workers were paid much less than promised, forced to work long overtime hours, and required to pay over \$3,000 per month for overcrowded bunk houses.²⁸⁹ Filipino workers hired by a Hong Kong recruiting firm to work on Australian oil rigs were reportedly paid only \$3 an hour.²⁹⁰

Long, Complex, and/or Non-Transparent Supply Chains

Because the mining sector is so varied, different types of minerals take different paths before they reach the consumer. However, most minerals, whether from large commercial mines or ASM follow a basic path. After extraction from the earth, minerals are cleaned, sorted, transported, refined, smelted, or otherwise processed before being sold to manufacturers and retailers. In the case of mined gem stones, the processing consists of cutting and polishing. ASM minerals pass through several additional layers of consolidators, intermediaries, and exporters (some of whom may actually be illegal smugglers) before the minerals enter into the processing level of the supply chain.



Source: Verité image.

Each additional layer of middlemen limits the transparency of the supply chain. Global Witness, among other groups, has documented how middlemen in the DRC (in this context, known as “comptoirs” and “negociants” obscure the origin of conflict minerals before selling them up the supply chain, purposefully obscuring their origins.²⁹¹ The smelting/processing stage is also a critical point in the supply chain in terms of transparency – during processing, minerals from a variety of origins are normally mixed together. For this reason, the ENOUGH Project, has identified smelters as a key strategic point for certifying minerals from the DRC as “conflict-free.”²⁹²

Intermediaries can also play a role in suppressing wages of self-employed miners involved in small-scale mining – miners may have no choice but to sell their goods to an intermediary in their region, which means they may be forced to accept profits significantly lower than what they could fetch on the open market.²⁹³ Miners may also take loans from these middlemen to pay for their basic living expenses, leaving them vulnerable to cycles of indebtedness. For example, consolidators in Mali, foreign traders, who control about 90 percent of the country’s gold exports, “buy gold through a complex network of intermediaries and local buyers.” These intermediaries also provide loans to the miners, while paying rates much lower than market prices.²⁹⁴ Verité research on gold mining in Peru found that many

independent ASM miners are forced to operate illegally if they cannot afford to pay excessive up-front fees to land concession holders, even if the independent miners have been working the land for years. Peruvian law prohibits the sale of gold without a receipt, which is only provided to miners who have formalized businesses and are operating legally. Both workers who are paid in gold (a common practice) and independent ASM miners working in these informal mines are therefore left with the only option of selling gold to middlemen who pay them a lower price for their gold due to the lack of receipts. This further lowers the already meager earnings of workers and self-employed ASM miners.²⁹⁵

Where minerals are illegally extracted, they may be smuggled out of the country, obscuring their origins even further. Consumer and governmental pressure for “conflict-free” minerals from the DRC may have actually increased smuggling of minerals out of the country. The UN reported that after the Congolese government mandated that all minerals were required to be conflict free, smuggling into neighboring countries or Rwanda and Burundi increased.²⁹⁶ Large amounts of iron ore mined in Mexico have been smuggled out of the country to processors in China.²⁹⁷ After processing in China, the ore will be mixed with and indistinguishable from ore mined legally. This is also the case with gold extracted illegally from Peru. Verité’s research indicates that a significant amount of the Peruvian gold that is produced illegally and/or under conditions conducive to human trafficking makes its way into Peru’s exports.²⁹⁸ According to an in-depth study released in 2012 by Marcoconsult, a private Peruvian research firm, approximately 1.6 million ounces of illegally produced gold worth \$2.9 billion was exported from Peru in 2011, representing approximately 22 percent of Peru’s gold exports.²⁹⁹ The director of the study claimed that illegal gold exports superseded cocaine exports from Peru,³⁰⁰ which surpassed Colombia as the world’s biggest cocaine exporter in 2012.³⁰¹ Much of these illegal gold exports are shipped to Switzerland where they are melted down and combined with gold from other countries and it is impossible to determine the provenance of gold once it has been processed into gold ingots.³⁰² Because informal and illegal gold miners fail to declare their profits and pay taxes, the State loses an estimated \$450 million in tax revenue.³⁰³ The profits from illegal gold exports also fund criminal groups.³⁰⁴

While vulnerability for trafficking is typically the highest at the level of extraction, there are also cases of human trafficking around mineral/metal refining and processing. For example, charcoal used in the production of Brazilian pig iron has been produced with forced labor.³⁰⁵ Child labor has also been reported in the processing of gemstones.³⁰⁶

Federal Procurement in the Extractives/Mining and Basic Metal Production Sector:⁵

Very little iron or steel is procured in primary form by the United States Government. The mining sector is mainly implicated in the federal spend in the context of primary inputs to prime contracts involving heavy hardware purchases such as weapons systems, spacecraft, aircraft, ships, tanks, trucks, and passenger cars. Steel is also a key primary input to many federal construction contracts. Both heavy equipment and construction are major elements of the federal spend. In FY2013, transportation equipment (air, space, ground, and sea combined) accounted for \$78.14 billion in federal spending.⁶ Construction (PSC Y%) accounted for \$19.71 billion.

Metal ore is procured by the United States in primary form mainly by the US Mint, which spent \$3.54 billion in FY2013 on precious metals in primary form (PSC 9660). Spending on ore by the US Mint is quite consolidated, with nearly all FY2013 contracts distributed among only six suppliers, the largest of

⁵ All federal procurement data is drawn from the [Federal Procurement Data System](#). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

⁶ Total spending on transportation equipment was derived from a composite of PSC codes 15%, 16%, 17%, 18%, 19%, 20%, 22%, 23%, 25%, 26%, 28%, 29%, 30%, and 31%.

which, Coins ‘N Things, provided 40 percent (\$1.42 billion) of ore. Gold is a major component of the Mint’s spend, a commodity known to be at risk for trafficking in many world supply chains.

The federal spend on oil and gas (PSC 9130, 9140, 9150) in FY 2013 was \$14.379 billion.

Human Trafficking in the Commercial Sex Industry

President Obama’s Executive Order 13627 – Strengthening Protections Against Trafficking in Persons in Federal Contracts – clearly prohibits Federal contractors, contractor employees, subcontractors and subcontractor employees from “directly supporting or promoting trafficking in persons, the procurement of commercial sex acts, or the use of forced labor in the performance of the contract or subcontract,” and tasks the Federal Acquisition Regulatory (FAR) Council to amend the Federal Acquisition Regulation to reflect this.³⁰⁷

There were 4.5 million victims of forced sexual exploitation worldwide in 2012, according to ILO estimates. The vast majority of victims were female (98 percent) and most were adults (79 percent). The majority of victims of forced sexual exploitation were found to have crossed international borders (74 percent), while 19 percent were trafficked domestically. Seven percent of victims remained in their home areas.³⁰⁸

In a 2014 report, the ILO estimated that forced sexual exploitation generated \$99 billion in annual profits. Profits are highest in the Asia-Pacific region (\$31.7 billion) and the developed economies and the EU (\$26.2 billion). Forced sexual exploitation has the highest profits per victim, more than any other category of human trafficking. This is because of the low capital investment, the low operating costs, and the high prices clients pay. The global average annual profit per victim is \$21,800, which is six times more than the profits made off of victims of forced labor.³⁰⁹

There is a strong link between labor trafficking and forced sexual exploitation. Whenever there are large migrations of men to an area for employment (a risk indicator for human trafficking), there is a high demand for sexual services, which often generates sex trafficking. This is exacerbated when workers are living in isolated regions, away from familial and social connections. In Peru, for example, there is a high prevalence of sexual exploitation in and around gold mining camps. A local NGO in Madre de Dios reported that girls are deceived, kidnapped, threatened, or forced into debt bondage and brought to brothels in mining camps.³¹⁰ Verité research revealed that some girls and women respond to advertisements for jobs or are directly recruited by middlemen who offer unspecified employment in mining camps or jobs as cooks, store clerks, or waitresses. The research found that some of them were employed in these occupations, but were also forced to provide men with sexual services, while others were trafficked into brothels, where they were threatened with physical and sexual violence if they tried to flee.³¹¹ The United Nations’ Special Rapporteur on Contemporary Forms of Slavery echoed this finding.³¹² Similarly, women from Mexico who are promised jobs in legal industries such as tourism or healthcare in the United States may be forced by traffickers to repay smuggling fees by working as prostitutes in brothels based at agricultural migrant work camps.³¹³

Although the United States Department of Defense has a strict prohibition against facilitating or supporting trafficking,³¹⁴ sex trafficking has also been connected to United States military bases. A 2009 report found that women are trafficked to meet demand for prostitution near United States military bases in South Korea.³¹⁵ Influxes of U.N. peacekeepers and associated personnel in conflict and post-conflict environments have also been identified with increased demand for prostitution, which can fuel sex trafficking.³¹⁶

In addition to the mining and agriculture sectors, the hospitality and transportation sectors are closely tied to the sex industry. Hotels are a major location for commercial sexual exploitation, and tourism development in a region often increases the demand for commercial sex. Airplanes, buses, and trains are modes of transportation for trafficking victims, and forced sexual exploitation often occurs at truck stops. The hospitality and transportation industries are gradually beginning to take some steps to combat the problem. For example, Hilton, Starwood, Sabre, which owns Travelocity, and Carlson, which owns Radisson and Country Inns and Suites, have both begun training employees around the world to identify and report trafficking victims.³¹⁷ Marriott and Sabre, in partnership with the World Tourism Organization, the United Nations Office on Drugs and Crime and UNESCO, launched a program aimed to educate travelers on human trafficking issues using websites, newsletters and consumer apps.³¹⁸ The Department of Homeland Security, Department of Transportation, and Amtrak are partnering to provide trainings to employees as well.³¹⁹

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Fishing and Aquaculture

This sector report covers wild caught fishing, farm fishing (aquaculture) and fish processing. For more information on the human trafficking risks associated with fishing and aquaculture, see the forthcoming commodity reports: [Fish](#) and [Shrimp](#).

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☐ Long, complex, and/or non-transparent supply chains

Overview of the Fishing and Aquaculture Sector:

Economy and Workforce:

The fishing and aquaculture sector is one of the world's fastest growing sectors. In 2012, global per capita fish consumption was approximately 19.2 kg per person, up from 9.9 kg per person in 1960.³²⁰ The FAO estimates that fishing and aquaculture provide livelihood for 10-12 percent of the world's population. Over 58 million people are involved in fishing and aquaculture, approximately 37 million of whom are engaged full-time. Over 84 percent of those involved in the fish sector are in Asia, with an additional ten percent in Africa. Although the majority of workers in the direct-capture fish sector are men, the sector also provides livelihood for women, who represent an estimated 15 percent of all workers engaged in fishing and aquaculture, and up to 90 percent of workers in secondary activities such as processing.³²¹

Fish is a highly traded commodity, with about 200 countries exporting fish and fishery products. Fish and fish products are particularly important for many developing nations, where the fish trade accounts for more than half of the total value of traded commodities. Developing economies saw their share rise to 54 percent of total fishery exports by value in 2012.³²² In addition to trade, fishing and aquaculture are important to many rural poor. Fish provides a key protein source in diets as well as providing jobs and income in areas where other income sources are scarce.³²³

With the expansion of the fish sector has come an increase in illegal, unreported, and unregulated (IUU) exploitation of wild fish stocks. IUU fishing refers to all activities that happen outside the control of laws and regulations, including activities such as fishing without a license, fishing in a closed area, fishing with prohibited gear, fishing in excess of a quota, and fishing of prohibited species. Fishing regulations can be challenging to enforce, as much of the IUU fishing happens on the high seas – that is, in water over 200 nautical miles from shore, where there is little regulation and enforcement. Outside of a nation's "exclusive economic zone" (the 200 mile strip of ocean adjacent to the shoreline), vessels are generally governed by the laws of the country in which they are registered, or their "flag state." Under the practice known as "flags of convenience," fishing vessels may be registered in countries with no meaningful link to their operations, including in countries with severely limited interest or capacity to enforce fishing-related laws on vessels flying their flag.³²⁴ This structural loop-hole built into the regulation and enforcement of fishing practices has led to increased environmental and social abuses in the sector, as the prevalence of IUU fishing has contributed to sharply declining world fish stocks through overfishing, leading vessels to undertake longer and longer voyages in order to find fish, and thereby increasing the vulnerability of workers who are stuck aboard for longer and longer periods of time. Declining stocks also increase the precariousness of employment for workers involved in fish processing, by threatening the overall viability of the industry.

As overfishing has reduced the biomass of many fish species, aquaculture has emerged as a way to fill rising demands for fish, and the FAO predicts that aquaculture harvests will surpass wild catches in the relatively near future.³²⁵ By 2030, more than 60 percent of consumed fish, mollusks, and crustaceans may come from aquaculture. Like fishing, aquaculture is particularly strong in developing economies, and over 90 percent of aquaculture activities take place in Asia. While not contributing to overfishing, aquaculture can lead to other kinds of environmental degradation through chemical inputs, disease, contamination of wild stocks, land conversion, and water pollution. Some aquaculture species are fed fishmeal, which is often derived from wild caught stocks, thus contributing to the problem. If their development is not well managed, aquaculture operations may also risk depriving local populations of previously arable farm land, potentially leading to land conflicts.³²⁶

Supply Chain Overview:

Fish and shellfish are harvested in open waters or raised via aquaculture in ponds, tanks, or bounded coastal waters. After harvest, fish are packed and transported to processing facilities or wholesalers. Processors convert the fish to consumer products such as canned, frozen, or smoked products, and fillets or other fresh products. Some fish may pass through multiple levels of processing, while others, such as certain kinds of shellfish, are transported live. Wholesalers receive both processed products, as well as more minimally processed fresh fish, from both foreign and domestic sources. The wholesalers then distribute the products to retailers and restaurants. Some fish products and by-products are not used for human consumption, but are instead used in fish and animal feed.³²⁷

United States Seafood Supply Chain:

The United States has the largest Exclusive Economic Zone fishing rights in the world and fishing regions include the Northeast, Southeast, Alaska, Pacific Coast, and South Pacific. Top species include crabs, shrimp, salmon, lobsters, cod, flatfish, scallops, hake, scallops, oysters, herring, and sardines. Catfish is by far the most common aquaculture-raised product in the US followed by crawfish, salmon, trout, oysters, tilapia, striped bass, clams, shrimp and mussels.³²⁸

The United States imports between 80-90 percent of its fish, about half of which is sourced from aquaculture.³²⁹ The top imported products are shrimp, freshwater fish, tuna, salmon, groundfish (such as cod, flounder, and halibut), crab, and squid. Shrimp constitutes the US's largest seafood import, with over \$3.4 billion worth of shrimp imported to the US from the top producing countries of Thailand, Indonesia, India, Ecuador, Vietnam, Malaysia and China in 2012.³³⁰ Tuna is the second most imported fish product, with canned, fresh, and frozen tuna coming from Thailand, Philippines, Indonesia, Vietnam, and Ecuador.³³¹ Other important products in order by volume imported include: salmon from Norway, Canada, and Chile; groundfish species like cod, haddock, pollock and hake from Canada and Northern Europe, crabs and crabmeat from Southeast Asia, and frozen fish from China, Russia, Canada, and Iceland.³³²

Although domestic fishing is heavily regulated in the United States, according to one study, an estimated 20-32 percent of wild-caught fish imported to the United States comes from IUU fishing.³³³ One recent study found that Thailand had the most illegal fishing, with 25-40 percent of Thai tuna being illegally caught. Pollack and salmon from China, as well as tuna from the Philippines, Vietnam and Indonesia also registered high rates of illegality.³³⁴ Imports from Canada all had levels of illegal catches below ten percent, as did imports of clams from Vietnam and toothfish from Chile.

Risks to Human Trafficking in this Sector:

The United States Department of State's 2014 *Trafficking in Persons Report* noted evidence of human trafficking in the fishing and aquaculture sector in the following countries: Angola, Bangladesh, Belize, Burma, Burundi, Cambodia, Comoros, Costa Rica, Democratic Republic of the Congo, Fiji, Ghana, Indonesia, Israel, Jamaica, Kenya, Kiribati, Madagascar, Malawi, Mauritius, Mongolia, Namibia, Federated States of Micronesia, Sierra Leone, Singapore, Solomon Islands, Sri Lanka, Taiwan, Tanzania, Thailand, Timor-Leste, United Kingdom, and Vietnam.³³⁵

Hazardous/Undesirable Work:

The ILO identifies fishing as a highly hazardous sector.³³⁶ Fishers on vessels routinely face hazards and conditions of work that are exacerbated by poor weather conditions, a constantly moving work environment and the lack of medical care on the open water. While on vessels, fishers are exposed to sun and salt water without protective clothing, slippery/moving work surfaces, malfunctioning gear, regular use of knives/other sharp objects, entanglement in nets, large waves, inadequate sleeping quarters, inadequate sanitation, and a lack of fresh food and water. Should someone become ill while on board a vessel, it can be difficult to seek medical care in a timely manner. Collisions or shipwrecks are also a risk.³³⁷

Fishing crews are generally overseen by a captain or boss. The captain or boss has a high financial stake in a profitable voyage, incentivizing abusive management practices including actual or threatened physical abuse (hitting, threats, or actual violence with weapons, denial of rest), verbal abuse (yelling, threats), and other forms of intimidation. When setting nets or hauling in a catch, workers may be required to work around the clock without breaks for days. In some cases, captains may force workers to use amphetamines or other drugs as a way to combat fatigue.³³⁸ In extreme cases, crew members have reported witnessing murders of crew members at the hands of bosses.³³⁹

Fish and shrimp processing workers also face a high exposure to hazardous work conditions. Previous studies of the sector have identified a wide variety of risks including mechanical and electrical accidents, excessive noise levels, extreme cold, aggravation of respiratory conditions including asthma, skin and eye infections, and musculoskeletal injuries. Workers may also be exposed to "bioaerosols containing seafood allergens, microorganisms and toxins."³⁴⁰ Workers in shrimp processing facilities in Bangladesh interviewed by Verité reported being denied access to bathroom facilities for entire shifts, which can cause urinary tract infections and gastrointestinal disorders.

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

Workforce vulnerability in fishing derives from a variety of causes, some of which have to do with the typical structure of employment relationships in the industry, and some of which have to do with the economic and education levels of the worker populations in question.

On small fishing boats, employment relationships are predominantly casual.³⁴¹ Sometimes relationships between captains and crews are rooted in traditional patronage dynamics, leading to a high degree of dependence for workers, who may belong to families with historically subservient, dependent relationships to their boss's family, on whom their kin might depend for access to things like school fees or land rights, severely limiting the employee's ability to advocate for better working conditions on the fishing boat.³⁴² Further complicating employment relationships in fishing, payment on both large and small fishing vessels is often based on the traditional "share" system, in which worker pay is based on an allotment of net proceeds from the catch after expenses for output (food, fuel, etc.) are deducted. Under the "share" system, workers are considered 'partners' in the fishing venture rather than employees, and are therefore denied legal protections available to other classes of workers. The "share" system also means that crew members share the risks normally associated with being owners. If a voyage does not clear a profit, workers may not be compensated, leaving them vulnerable to debt.³⁴³ Fishers may also

have their pay docked for items consumed on board, including cigarettes, alcohol, medicine, and in some cases, food. These items are often deducted at highly inflated rates, and in situations where fishers already have debt to money lenders, labor brokers, or the boat operators, this can tip them over into a situation of debt bondage. In some cases, a worker's family at home may also take loans from the boat ownership while the fisher is at sea; this too is deducted from the fisher's pay and workers are typically charged high rates of interest. The many fishers who are paid under some version of the "share" system often lack visibility into the calculation of boat profits, and therefore of their wages. For example, workers interviewed by Verité in the Philippines' tuna sector noted that they are barred from observing the catch being weighed, leaving them reliant on employer promises, and leading to a perception of being cheated in the payment of their wages.³⁴⁴

Fish processing facilities are increasingly reliant on "casual" labor rather than permanent employees, allowing them flexibility to respond to lower and unpredictable catches. For example, Verité research into the tuna sector in the Philippines found that canning facilities have shifted to hiring nearly all of their workers through labor cooperatives, which provides them with a highly flexible labor pool and allows them to avoid a direct employment relationship and the ensuing benefits for workers that that relationship would entail. The growing casualization of the canning work force has had a particular impact on women, who make up the bulk of the canning workforce and are often the wives or female family members of the fishers. Workers employed through employment agencies face constant labor insecurity, as their contracts generally range from five to six months. Workers employed by cooperatives also face job insecurity, since one of the requirements for them to maintain their cooperative membership is to keep themselves employed. They may reapply at the end of each employment period, but there is no guarantee they will be re-hired. Due to the decrease in catch due to overfishing, employees across the tuna sector in the Philippines expressed fear that voicing any grievance would result in "black-listing" from the entire industry, a fear that seriously limits workers' capacity for self advocacy. In areas such as the General Santos Region of the Philippines, where the fishing sector represents the vast majority of economic activity, the threat of black-listing is experienced as a severe menace.³⁴⁵

Workers aboard fishing vessels are inherently isolated. Fishing vessels, particularly those involved in long-distance fishing, have an increasing capability to stay at sea for long periods of time – even up to several years. Rather than regularly docking, these vessels can "transship" caught fish and fuel via smaller vessels. This may mean that the crew of these ships has no access to port, leaving them unable to escape, report abuse, or seek assistance.³⁴⁶ While aboard vessels, workers rarely have access to means of communication with the outside world. They may be out of reach of cell phone communication, and barred from using other on-board communication devices such as radios or satellite phones. Depletion of fish stocks may also contribute to longer voyages, as vessels journey further and further from port, leaving workers on board for longer periods of time. Verité research has found that in some cases, vessel operators may deceive workers regarding the length of the voyage or the geographic itinerary, taking workers into illegal fishing zones or the sovereign waters of other countries, where workers may face detention or arrest.³⁴⁷

In fact, workers engaged in illegal fishing are especially vulnerable to labor trafficking and other forms of exploitation. They often use prohibited fishing techniques, such as explosives, which are extremely hazardous. They are sometimes employed by, or owe money to, criminal groups, making it hard for them to escape from exploitative situations without a perceived threat of violent reprisal. Also, because they are engaged in illegal activities, it is unlikely that they will complain to authorities about violations of their rights for fear of arrest. Fishermen are also vulnerable to maritime drug traffickers and piracy. Verité research in Ecuador indicated that drug traffickers sometimes killed or intimidated fishermen or forced them to traffic drugs. There were also reports that pirates robbed fishermen of their boats, catches, or motors, making them vulnerable to debt bondage. In some cases, their employers deducted the amount of these goods from their pay. In other cases, self-employed fishermen had obtained loans from informal

money lenders for their boats, and upon losing them, had to work in fishing for prolonged periods to pay off the debt.

A final point is that child labor is common in fishing and aquaculture across the globe. Many children who are engaged in fishing or aquaculture participate on an informal basis, and it is common for children to enter the sector working alongside their parents or other adult family members.³⁴⁸ Some children may seek out work in the fishing sector as a means to earn money or support their family, particularly when this is considered a culturally appropriate way for boys to prove their maturity.³⁴⁹ Children may enter the sector as a means to pay off family debt owed to boat captains or ownership. In some contexts, such as fishing around Lake Volta in Ghana, children are recruited through traffickers who make upfront payments to the child's parents and deceive families regarding working conditions.³⁵⁰ Like adults, children participating in fishing may also be subjected to deductions for provisions, such as food and cigarettes, leaving them in debt.³⁵¹ In some cases, children may be recruited for fishing activities because of a perceived advantage in lung capacity (i.e. their capacity diving for fish) or hand dexterity.³⁵² Children may also be recruited because of a perception that they are more docile.

Migrant Workforce:

Migrant labor is increasingly used in the fishing, aquaculture and fish processing sector as a means of cost savings. Abuse of migrant workers in the fishing sector has been well-documented. Fishers are generally recruited in their home villages or ports and a worker may pass through a series of agents, each adding an additional debt burden through fees for their services.³⁵³ This recruitment-related debt burden can act as a binding force for fishers, preventing them from resigning or advocating for better conditions, for fear of losing their jobs. Working conditions are often obscured until the worker is on board the vessel, possibly already in international waters, with no means of recourse. All workers, including migrant workers, on vessels are routinely required to surrender identity documents such as passports, thereby restricting their freedom of movement in foreign ports.³⁵⁴ Some larger vessels can stay at sea for a year or more at a time, and lack of access to legal documentation can powerfully inhibit a worker's ability to escape, even if he does gain access to port. Cases of foreign fishers being forced to work in the sector have also been reported.³⁵⁵

Thailand, where human trafficking has been well documented in both fishing and fish processing, has one of the lowest rates of unemployment in the region,³⁵⁶ leaving it dependent on a low-skilled work force composed of foreign workers. Up to 80 percent of migrant workers in Thailand are from Burma, and the general migrant worker population is vulnerable to a variety of abuses, including killings, torture, extortion, sexual abuse, and forced labor.³⁵⁷ There are estimated to be thousands of Burmese migrants working aboard Thai vessels, many in conditions tantamount to slavery.³⁵⁸

In the United States, fish processing, like other forms of meat processing, relies heavily on the labor of migrant workers. Documented migrant workers in United States fish processing are classified as H-2B workers (a visa category intended for guestworkers in sectors other than agriculture), who are generally not afforded the same protections as H-2A workers (see the [Guestworker Visas](#) pullout box for more information). In 2012, the United States Department of Labor found a Louisiana seafood processing company employing H-2B guestworkers in violation of a number of labor protections – including health and safety and minimum wage violations.³⁵⁹ Workers also alleged that management made threats of retaliation against them, including threats of deportation and threats against their families in Mexico through their labor brokers.³⁶⁰ A recent report from Centro de los Derechos de Migrante, Inc and the American University Washington College of Law Human Rights Clinic detailed abuses faced by female H-2B workers in the Maryland crab processing sector. The workers interviewed for the report were indebted to labor brokers who recruited them for the jobs. Wages were much lower than promised by recruiters, and workers reported wage deductions and piece-rate wage structures that made it nearly impossible to attain the minimum wage. Further deductions were taken for the purchase of basic personal

protective equipment. Although the workers face abuse and harassment in addition to low wages and hazardous working conditions, they feared retaliation from their employer and believed they had no viable grievance mechanism.³⁶¹

In Japan, labor exploitation has been identified in the fishing sector in conjunction with the Industrial Trainee and Technical Internship Program, whose stated purpose of is nurturing talent from developing countries. The program has been seen to effectively permit the exploitation of inexpensive migrant labor.³⁶² Many of the workers placed within the foreign trainee program work on fishing boats.³⁶³ The training program lasts for up to three years.³⁶⁴ These workers are initially recruited and hired by labor brokers in their home country, and the United States Department of State reports that workers in the training program often pay substantial fees to secure their jobs, leaving them vulnerable to bonded labor, even though such fees are illegal.³⁶⁵ The majority of foreign trainee workers in the Japanese fishing sector are Indonesians³⁶⁶ and Filipinos, with some Chinese fishers also present.³⁶⁷ Though less media attention has been paid to abuses committed against foreign trainees working within the fishing and aquaculture sector in Japan, it appears that these individuals face the same abuses as those working on farms and in factories. Like other fishermen, the trainees face long hours and hazardous conditions. Foreign trainees in the fishing sector are paid approximately 25 percent of the wages of Japanese fishers.³⁶⁸

Migrant workers are also reportedly exploited in the Irish and Scottish fishing sectors where they are subject to underpaid wages, physical abuse, and intimidation. In one publicized case, Filipino men were recruited illegally on transport visas, were charged fees for recruitment, and had their passports confiscated and their wages withheld upon arrival.³⁶⁹ Nigerian fishers in UK waters have also reported exploitation, and a recent report suggested that migrants from North Africa, Russia, and Turkey may also be vulnerable.³⁷⁰

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in Labor Supply Chains:

Employment in the fishing sector is highly dependent on local context, the size of the vessel, and the type of fishing undertaken. Fishers employed on larger boats may have relatively formal employment agreements with the captain of the vessel or fleet ownership, but contracts are rare. Workers may be recruited through formal or informal labor recruiters, to whom they owe debt for their job placement. Often, workers recruited through brokers will have no advance knowledge of their actual employer, with whom they may be required to spend months at sea. Many trafficked workers on fishing vessels have reported incidents of violence, including homicide.³⁷¹

There have been many documented cases of Southeast Asian workers forced to work in the fishing sector from countries such as Cambodia, Burma and Indonesia through labor agents or brokers. In one case documented in Bloomberg News, an Indonesian man sought work through an employment agency in Jakarta specializing in placing crews on foreign fishing vessels. Promised a relatively high salary, he borrowed money to pay a fee to secure his job. The labor agent rushed him through a contract in English, which he could not read. The contract compelled the worker to surrender 30 percent of his salary, which he would forfeit unless he completed his contract. He was to be paid nothing for the first three months of work, and if he did not perform work to the fishing company's satisfaction, he could be sent home and charged for airfare. He was required to work as many hours as required by the boat captains.³⁷² This Indonesian worker was on a South Korean owned vessel operating in New Zealand waters, illustrating the complexity of relevant jurisdiction in the fishing sector.

In some regions, recruitment, human trafficking, and abuse of migrant workers in the fishing sector is tied to organized crime. In one egregious example, in the Sea of Okhotsk, to the east of mainland Russia, at least two illegal crabbing vessels run by organized criminal organizations have made use of labor trafficked into Russia from the Ukraine. In that instance, Ukrainian crew members were recruited through employment agencies in the Ukraine, which charged workers between \$700 and \$1,000 to place them

aboard ships. The agency also facilitated the contract signing process. Many workers were required to pay for their own transportation to the ship in Russia, where the men waited for roughly a month in a hotel before they were to embark. Once in Russia the crew members were told that the original contracts they had signed were no longer valid, and that they were required to sign new contracts agreeing to half the pay they had previously agreed upon. Crew members were delivered to the “mother boat” via a smaller vessel -- the crabbing operation that they had signed a contract for was illegitimate, and the crabbing ships were hiding out at sea to avoid the Russian authorities. Once on the crabbing boat the men were not allowed to leave unless they were willing to pay an additional fee of \$1,000 to have a ship come and pick them up. Workers were required to work seven days a week for 18 to 22 hours each day; some workers sustained injuries while working due to lack of sleep. Workers were not provided with sufficient food and water; at times workers ate the bait for the crabs, or attempted to catch fish to feed themselves. Workers were constantly in freezing conditions, working in water that covered their legs that was 30 degrees Fahrenheit. As a result of these conditions many of the men developed chronic illnesses, such as pneumonia, chronic bronchitis, prostatitis, and PTSD. Physical abuse was also prevalent on the ship, with workers being beaten to the point of having their teeth knocked out. Workers aboard these crabbing ships were unable to leave for extended periods of time, as they were not allowed to disembark when the boat went to port.³⁷³

In addition to the risks posed by recruitment for migrants in the fishing sector, workers may be internally trafficked by labor contractors or middlemen. In Bangladesh shrimp processing, Verité research found that labor contractors recruit workers both from local communities and from the population of internal migrants seeking work in the industry. Local Bangladeshi shrimp processors are generally extremely poor and thus seek any source of income. Shrimp processing plants use contractors to supply workers because it allows them access to a highly flexible labor pool, which is often necessary as plants work to meet the time and cost demands of buyers. Further, it allows plants to avoid any direct employment relationship with workers. Several labor contractors may provide workers to the same facility. Labor contractors act as their workers' supervisors within the facility (although the plant may provide its own supervisors as well), so contractors are often in a position to enforce disciplinary measures or fire workers. This makes expressing any grievance difficult for workers without fear of losing their job. Labor contractors are also in a position to control the payment of workers' wages. In a typical arrangement, the labor contractor is paid by the facility per unit of production. The labor contractor in turn pays the worker a percentage of the total amount he received from the facility, which incentivizes these labor contractor to underpay wages. For example, contract workers involved in de-heading shrimp are typically paid per basket of shrimp. Supervisors fill baskets with shrimp to a pre-established weight, and then give this basket to the worker for de-heading. The worker's pay is tied to the pre-established weight of the basket. In the Verité study, workers reported that supervisors would fill the baskets to exceed the predetermined weight, so that workers were forced to de-head more shrimp than they were being paid for.³⁷⁴

Federal Procurement in the Fishing and Aquaculture Sector:⁷

Federal procurement of fish and other seafood products represents a subset of overall federal subsistence procurement. Unfortunately, fish and seafood purchases are not broken out as a separate spending category within the PSC coding system, fish being grouped together with meat and poultry under the single PSC code 8905 (MEAT, POULTRY, AND FISH).

More detail is offered by the NAICS classification system, which is also tracked in the Federal Procurement Data System database. The NAICS codes 445220 (FISH AND SEAFOOD MARKETS) and

⁷ All federal procurement data is drawn from the [Federal Procurement Data System](https://www.fedprocurement.gov/). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

424460 (FISH AND SEAFOOD MERCHANT WHOLESALERS) are used to demarcate fish and seafood purchases, and the NAICS codes 311711 (SEAFOOD CANNING), 311712 (FRESH AND FROZEN SEAFOOD PROCESSING), and 311710 (SEAFOOD PRODUCT PREPARATION AND PACKAGING) track contracts for fish processing. When FPDS.GOV is searched for these NAICS codes, however, it becomes clear that only some federal agencies are distinguishing their fish contracts from their other purchases of food in their record-keeping by using the relevant NAICS codes; other agencies simply record the general PSC code for MEAT, POULTRY, AND FISH for all food procurement transactions.

A search of FPDS.GOV for the above fish-related NAICS codes reveals a spend of \$46 million on fish and fish processing in FY2013, almost all of which was procured by the Agricultural Marketing Service, the Defense Commissary Agency, and the Federal Prisons. Verité analysis of overall subsistence spending by US agencies reveals that these three agencies account for approximately half of United States subsistence procurement. The other half is largely accounted for by the Defense Logistics Agency, which buys 45 percent of all food purchased by the United States Government, and to a lesser extent by the Veterans Administration, neither of which track fish expenditures separately from other purchases of meat and poultry.

Assuming that the DLA and VA procure fish in roughly the same proportions as other federal agencies that buy foodstuffs, the total federal spend in the fishing sector may be estimated at about \$92 million (twice \$46 million). This figure should be taken as a minimum estimate, however, since it is possible that not all AMS, DeCA, and FP fish contracts have been tagged with the NAICS codes.

There is no data at all available about fish procurement overseas in FY2013: all contracts tagged with the relevant NAICS codes were performed in the United States. This fact reflects the absence of DLA data in the analysis, and may also suggest that DeCA figures for fish purchases may only be capturing DeCA US-based procurement activities, and not subsistence purchases made by DeCA overseas. Amending the PSC system to isolate federal expenditures on fish/seafood and fish/seafood processing, or at least encouraging all relevant agencies to use the relevant NAICS codes for such contracts, would increase the ability to monitor federal supply chains in this vulnerable sector.

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Forestry

This report covers labor in the logging and wood processing industries. For information on the human trafficking risks associated with particular forestry commodities, see the forthcoming commodity reports: [Bamboo](#) and [Charcoal](#).

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☒ Long, complex, and/or non-transparent supply chains

Overview of the Forestry Sector:

The forestry sector refers to the growing and harvesting of timber.³⁷⁵ Work in this sector includes cutting down trees with hand-held tools or felling machines, dragging logs with tractors, separating and classifying logs, and grading logs according to specific characteristics, and inspecting relevant equipment.³⁷⁶

Economy:

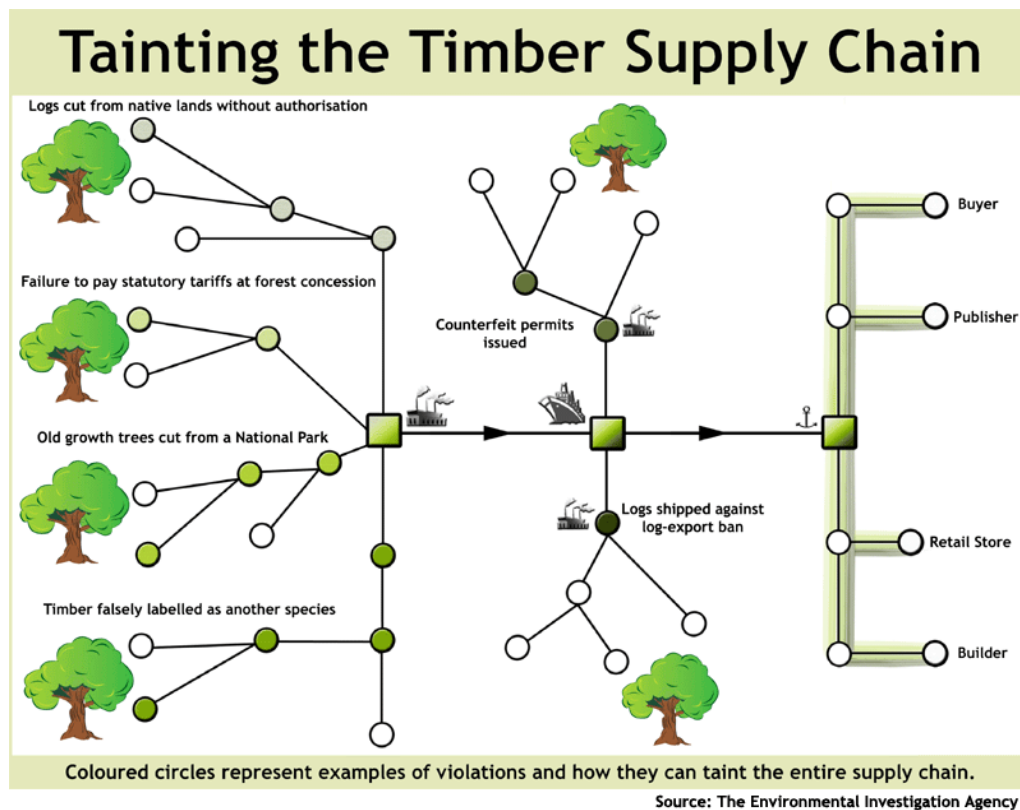
The forestry sector, which includes the extraction and processing of forest resources, contributed just under one percent of global GDP in 2011.³⁷⁷ The United States forest product industry produces over \$200 billion worth of wood and paper products annually.³⁷⁸

According to the Food and Agriculture Organization (FAO) of the United Nations, forestry products can be broken down into the following categories: roundwood (wood fuel, industrial roundwood), sawnwood, wood-based panels (veneer, plywood, particleboard, and fiberboard), wood pulp, other fibre pulp, recovered paper, and paper and paperboard.³⁷⁹ Global production of the major forestry products greatly declined in 2009 as a result of the global economic crisis. The industry is slowly recovering, but 2012 production levels were still below 2007 pre-recession levels. Production levels are expected to continue to slowly recover. The forestry products sector has historically been dependent on the success and growth of the construction sector and therefore the real estate market, so as these sectors recover, so should the forestry sector.³⁸⁰

In 2012, global industrial roundwood production was almost 1.7 billion cubic meters, sawnwood production was 413 million cubic meters, wood-based panel production was 301 million cubic meters, and fiber furnish (encompassing wood pulp, other fiber pulp, and recovered paper) was 399 million metric tons. Compared to other major forestry products, the production of wood fuel and paper and paperboard were relatively unaffected by the economic crisis. In 2012, global woodfuel production was almost 1.9 billion cubic meters, less than one percent below 2008 levels. Regional production patterns have changed a great deal, however. Production in North America, Asia-Pacific and Europe decreased while production in Africa and Latin America and Caribbean increased. Paper and paperboard production has been steadily increasing since 2008. In 2012, 400 million tons of paper and paperboard were produced.³⁸¹ Paper continues to be in demand despite the rise of digital products; paper is increasingly being used as a green alternative to petroleum-based packaging.³⁸² Global wood pellet production has increased in recent years, due in large part to Europe's bioenergy use targets and policies. Global production of wood pellets in 2012 was 19 million tons, half of which was traded internationally.³⁸³

Europe is by far the biggest consumer of wood pellets (80 percent of global consumption); North America is a distant, second (17 percent of global consumption). Europe and North America are also the top producers of wood pellets with 66 percent and 31 percent of production, respectively.³⁸⁴ In 2012, the US was the largest producer of industrial roundwood, followed by Canada, Brazil, China, and Russia. These five countries were also the largest consumers of the product. The United State was also the largest producer of sawnwood in 2012, followed by China, Canada, Russia, and Brazil. China was the largest importer of sawnwood, followed by the United States, Japan, the UK, and Italy. China's consumption of the product more than doubled between 2008 and 2012.³⁸⁵ China produced 39 percent of the world's wood-based panels in 2012, followed by the United States, Russia, Germany, and Canada. The top four producers were also the top four consumers. The top producing countries of fiber products in 2012 were the United States, China, Japan, Canada and Brazil. These countries, with the exception of China, were also the main exporters, along with the UK. In 2012, China and the United States are also the two largest producers of paper and paperboard, followed by Japan Germany and Sweden. These four countries, with the exception of Sweden, are also the major consumers, along with India.³⁸⁶

Illegal logging operations, including the processing of the wood, are valued at \$30-100 billion or ten to 30 percent of the global wood trade.³⁸⁷ In 2006, The World Bank estimated that the financial losses from illegal logging equaled approximately \$15 billion every year. The Government of Indonesia estimated that it loses approximately \$3.2 billion a year from illegal logging.³⁸⁸ Illegal logging is carried out using the following methods: "falsification of logging permits, bribes to obtain logging permits (in some instances noted as \$20-50,000 per permit), logging beyond concessions, hacking government websites to obtain transport permits for higher volumes or transport, laundering illegal timber by establishing roads, ranches, palm oil or forest plantations and mixing with legal timber during transport or in mills."³⁸⁹



Workforce:

Occupations within the logging industry include: fallers who cut down the trees with chainsaws or mobile felling machine; buckers who trim the felled trees and cut the logs; tree climbers who scale the trees in order to remove tree limbs; choke setters who set up the steel cables or chains and connect them to tractors that bring the logs to landing areas where they are sorted and loaded onto trucks; rigging slingers and chasers that set up the yarding system; log sorters, markers, movers, and chippers that sort the logs based on different specifications and tend the machines that chip up logs; logging equipment operators; drivers of tree harvesters, tractors, and skidders; and log graders and scalers who inspect and measure the logs.³⁹⁰

According to the FAO, the formal forestry sector employs 13.2 million people globally and the informal forestry sector employs 41 million. It is estimated that 840 million people, 12 percent of the global population, collect woodfuel and charcoal for their personal use as well.³⁹¹

The United States Bureau of Labor Statistics reported that there were 43,900 logging workers in the United States in 2012, and that it is projected that this number will decline by nine percent from 2012 to 2022.³⁹² In 2013 20,600 workers in the industry were employed as logging equipment operators, which accounted for the largest occupation in the sector. There were 7,870 workers employed as truck drivers, heavy and tractor-trailer, 5,030 workers employed as fallers, 2,420 workers employed as first-line supervisors/managers of farming, fishing, and forestry workers, and 610 workers employed as sawing machine setters, operators, and tenders, during the same year.³⁹³ The United States Bureau of Labor Statistics' Current Population Survey, which includes self-employed workers, reported that 47,000 workers were employed in Forestry, not including logging and 91,000 workers were employed in logging in 2013.³⁹⁴

Risks to Human Trafficking in this Sector:

The United States Department of State's 2014 *Trafficking in Persons Report* noted evidence of human trafficking in the forestry sector in the following countries: Brazil, Czech Republic, Guyana, Kyrgyz Republic, Laos, North Korea, Papua New Guinea, Peru, Solomon Islands, Sweden, Uganda, and Vietnam.³⁹⁵

Hazardous/Undesirable Work:

In 2012, in the United States forestry and logging industry, there were 4.3 injuries per 100 workers and 65 fatalities overall, down from 5.0 injuries per 100 workers and 78 deaths in 2011.³⁹⁶ In 2010, there was a fatality rate of 73.7 deaths per 100,000 workers in the United States forestry and logging industry. This rate was 21 times higher than the overall fatality rate of 3.4 deaths per 100,000 workers in the United States in 2010.³⁹⁷ The tools and equipment used by loggers, for example chainsaws, are extremely dangerous to operate. Loggers are in danger of falling or rolling logs as well. The hazards are exacerbated by poor weather conditions and the isolation of work sites.³⁹⁸ The pulp and paper industry is also dangerous. Pulpwood loads are very heavy and can fall and harm workers. There are also dangerous machines that workers are expected to operate.³⁹⁹ These risks are also true for other wood processing operations.

Loggers employed on illegal logging sites are even more vulnerable to dangerous working conditions and abuse due to the lack of regulation and the presence of organized crime. In key producing countries in the Amazon basin, Central Africa, and Southeast Asia, it is estimated that between 50 and 90 percent of all forestry activity is carried out by organized crime,⁴⁰⁰ which has increased incidents of murder and violence against indigenous peoples living in or near the forests.⁴⁰¹ There are a number of recent articles about the involvement of organized crime in the illegal logging industries, particularly in Latin America.⁴⁰² In Peru, 2012 World Bank estimates indicate that 80 percent of timber exports were linked to illegal logging, which funds narco-trafficking organizations and aids them in money laundering. In Peru,

and especially in Brazil, a large number of anti-logging activists have been murdered.⁴⁰³ Verité research in Peru indicated that there was a high rate of exploitative, dangerous, and forced labor linked to illegal logging.

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

Logging, legal and illegal, often occurs on the lands of indigenous people. This is especially true in Peru and Brazil where there are a number of large Indigenous Land Conservation Units that are home to the “greatest population of isolated indigenous communities” in the Amazon. In Brazil, the 1988 constitution secures the right of indigenous communities to this land. Despite this protection, these lands have been ravaged by mining and timber extraction as well as drug trafficking.⁴⁰⁴ The indigenous peoples living on the land are at great risk of violence and exploitation in illegal logging operations run by organized crime. In the Peruvian Amazon, it is estimated that 33,000 people, most of whom belong to various ethnic groups in the Amazon, are trafficked in the logging industry.⁴⁰⁵ Illegal logging is also pushing indigenous populations off of the land that they depend on for survival. Recently a video was released by Brazil’s National Indian Foundation that shows an isolated group of indigenous people allegedly seeking outside assistance because of the pressures and attacks they were experiencing from illegal logging and drug trafficking operations.⁴⁰⁶

In Burma, there are reports of indigenous people forced to work in the teak logging industry. If they complain or refuse to work, they are vulnerable to fines, imprisonment, and even torture by Burmese soldiers. The workers are often unpaid and no compensation is given for injuries that occur on the job.⁴⁰⁷

Anti-Slavery International’s 2006-2007 report on North Koreans attempting to flee to China found that many of those who were deported back to North Korea were trafficked while in detention. One of the major forced labor projects was state-run mountain logging. In the labor camps, prisoners were subject to beatings, overcrowding, unhygienic facilities, and a shortage of food.⁴⁰⁸

Migrant Workforce:

Migrant workers are vulnerable to human trafficking in the forestry and logging industry. In the United States, migrant guestworkers may be given H-2B visas to work in forestry, which has been classified as non-agricultural activity since 1986. Many American citizens, and even undocumented workers, do not want to work in forestry, as it is a dangerous and demanding job that offers low pay and only seasonal employment. Labor brokers have found that H-2B workers are more productive than work crews in the United States because they spend more time planting and less time traveling, as they live at or near the worksite in many cases. Forest Labor Crews also prefer H-2B workers because they risk raids by immigration authorities if they employ undocumented workers and it would be prohibitively expensive to employ United States citizens. Therefore, most large labor contractors have turned to the H-2B program to recruit their workforce. This is evidenced by the fact that 41 percent of labor brokers in forestry employ a workforce made up of over 75 percent H-2B workers, who comprised approximately 84 percent of forestry workers in 2005. The three largest hand tree-planting labor brokers in the Southeastern United States, which were responsible for over half of all tree planting in the Southeast, reported that all of their workers were H-2Bworkers (see the [Guestworker Visas](#) pullout box for more information).⁴⁰⁹

Migrant workers employed under H-2B visas are more vulnerable to trafficking than agricultural workers employed under H-2A visas since they have reduced rights to minimum wages and reimbursement of travel expenses, lack access to legal services, and enjoy fewer protections under current regulations. Guestworkers in the forest industry, many of whom have no previous work experience or access to social networks in the United States, face extreme isolation at worksites, are beholden to contractors, fear losing their jobs if they complain, and are generally unaware of their basic rights. By contrast, many undocumented forest workers belong to established social networks through which they are recruited onto forest labor crews. Therefore, guestworkers, who are more isolated and may be subject to deportation if

they complain, are more vulnerable to human trafficking. According to Verité's interviews and secondary sources, forestry workers tend to pay for part of their recruitment, visa, and travel fees up front, the rest of which is deducted from their paychecks by the labor brokers after arrival in the US. One forestry worker earned 13 cents per hour after deductions.⁴¹⁰

In the United States, a number of workers from Hidalgo, Mexico were allegedly subjected to human trafficking during the 2012-2013 forestry season by a forestry company. The workers were recruited on H-2B visas. According to worker accounts, their passports were taken upon arrival in the United States, and the workers were immediately transported to Northern California where they were split into groups and were led deep into the forest. The workers were forced to sleep in tents in the woods and made to work up to 13 hours a day, six days a week. The workers were forced to use dangerous chemicals with very little protective equipment; only gloves and overalls were provided. Workers said that the chemicals caused vomiting, skin peeling, and burning eyes. The workers were paid very little, sometimes as little as \$100 for two weeks of work, as illegal deductions, including a \$2,000 visa cost per worker, were taken out of their wages. The workers had to pay \$240 every two weeks for their food, which was provided by the father of one of the company supervisors. The meat was often spoiled when the workers received it and the drinking water that they were given was later deemed unsanitary. Supervisors were allegedly verbally abusive; some carried guns and threatened to kill workers if they didn't work hard..⁴¹¹

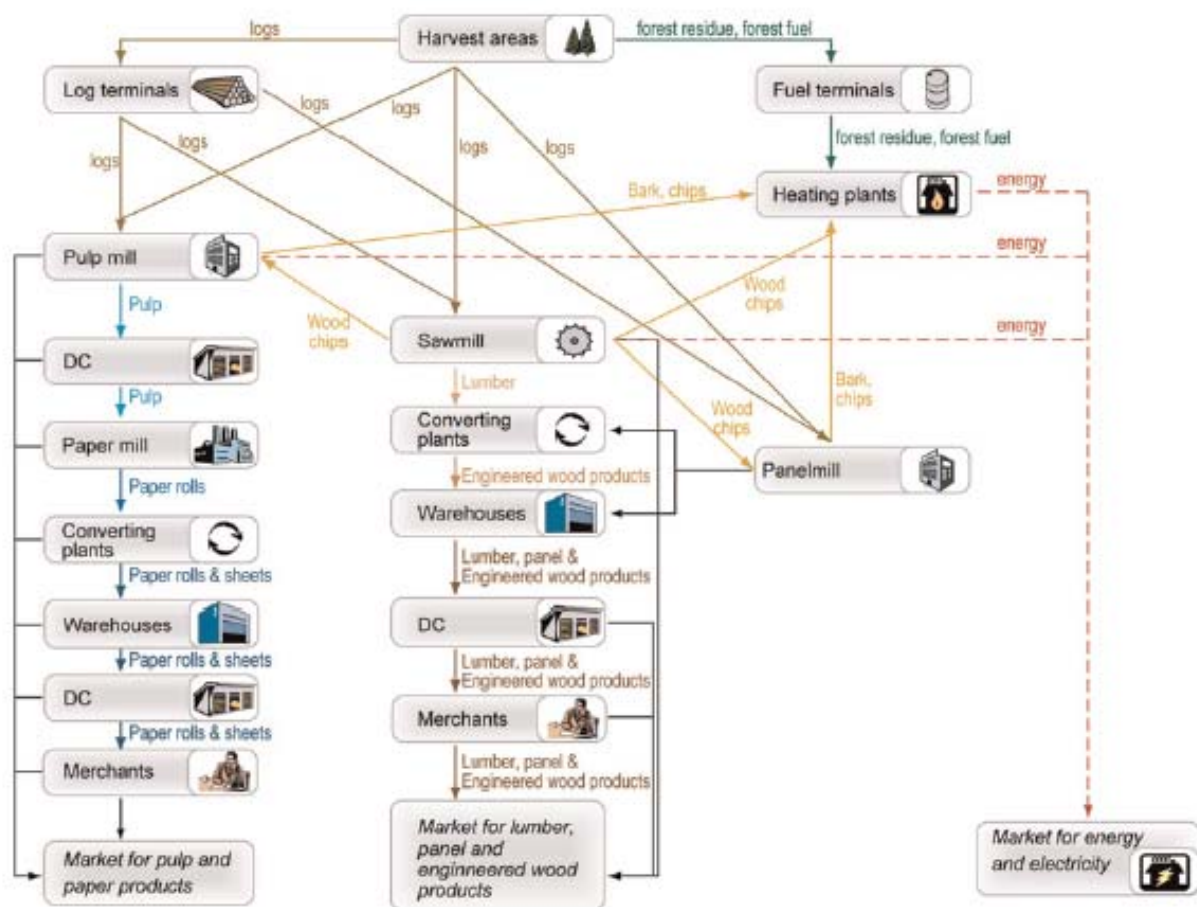
Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in Labor Supply Chain:

The presence of labor brokers and other types of middlemen in the production and export of timber creates a massive potential for abuse. In the United States, the visa system creates the need for labor brokers, as employers lack connections in sending countries and migrants seeking jobs need a sponsor in the US in order to secure a visa. Labor brokers thus play a crucial role in connecting these two parties and facilitating the complex visa application process. However, in many cases, labor brokers engage in exploitative practices that increase workers' vulnerability to trafficking, such as deception about the nature and terms of employment, excessive deductions from workers' pay, document retention, and threats.⁴¹²

A type of debt bondage specific to the forestry industry and other primary industries occurs when middlemen, having previously agreed on a price for timber from the local community, claim that the market price for the timber has gone down and refuse to pay the previously set price, leaving the community in debt.⁴¹³ In Peru, brokers, known as *habilitadores*, lure young men to the timber harvesting areas for employment. Once they are there, the brokers charge the men inflated prices for supplies in order to do the work. Since the sites are so isolated, the men have no choice but to pay for the supplies, which can result in a cycle of insurmountable debt.⁴¹⁴

Long, Complex, and/or Non-Transparent Supply Chains:

Illegal timber passes through a long and complicated international supply chain, making it difficult to prosecute the perpetrators of timber smuggling and to determine the products' provenance. Illegal timber is harvested around the world, but mainly in Africa and Asia where there are low levels of sustainable forest management and certification schemes, high levels of poverty, and weak governance. In Asia, much of the illegal timber is transported to Singapore, South Korea, and China, where it is processed, labeled as legal, and exported to the US and Europe.⁴¹⁵ In Russia, for example, there has been a major issue with illegal logging operations in the Russian Far East region that contains old-growth temperate hardwood forests. Ninety-six percent of this illegal wood is exported to China where it is mixed in with legal woods and sold on the international market.⁴¹⁶ Workers employed in illegal logging, which is primarily controlled by violent criminal groups, are inherently more vulnerable to human trafficking since they have a legitimate fear of reprisal for leaving their jobs without permission or walking away from debts. As they are engaged in illegal activities, they are less likely to be comfortable filing grievances with authorities.



Source: Carlsson, Dick, Sophie D'Amours, Alain Martel, and Mikael Ronnqvist. "Supply Chain Planning Models in the Pulp and Paper Industry." *Information Systems and Operational Research (INFOR). Journal*, Vol. 47, No. 3, (2009): 167-183.

Federal Procurement in the Forestry Sector:⁸

One major way that the forestry sector is implicated in the federal spend is via the lumber and other wood products that are used in federal construction projects. As with other building materials, lumber is most often procured through subcontracts embedded within prime construction contracts, rather than directly purchased by the Government, making spending on lumber difficult to isolate in the Federal Procurement Data System. Direct spending on lumber and other wood building materials (PSC 55%) in FY2013 was only \$42 million out of a total spend on construction of \$19.71 billion.

Tree planting and forestry associated with recuperation from forest fires is procured by the Forest Service, the Bureau of Land Management, and the United States Fish and Wildlife Service, as well as a few other agencies. In FY2013, the United States spent \$55 million on forestry labor of this kind (PSC F004, F005, and F018).

⁸ All federal procurement data is drawn from the [Federal Procurement Data System](http://www.fedprocurementdata.gov). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

Paper products for forms and office use are used by virtually every federal agency, with most procurement made through the GSA's Federal Acquisition Service. In FY2013, the federal spend on office stationery and forms (PSC 7530 and 7540) was \$25 million, \$12 million of which was procured from sheltered workshops for the blind and UNICOR/Federal Prison Industries.

Federal spending on books, newspapers, and periodicals (PSC 7610 and 7630) was \$202 million in FY2013. Digital media subscriptions are not distinguished from paper media purchases in the PSC tracking system, however, so it is likely that many of these expenses are not relevant to the forestry sector.

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³⁷⁹ Food and Agriculture Organization of the United Nations. FAOSTAT. "Global production and trade of forest products in 2012." 2012. <http://www.fao.org/forestry/statistics/80938/en/>

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³⁸² Goergen, Michael and Harding, James and Owen, Carlton and Rey, Mark and Scarlett, Lynn. "Workshop Report and Recommendations". *The State and Future of US Forestry and the Forest Industry*. Washington, DC: May 29-30, 2013. http://www.usendowment.org/images/Forest_Sector_Report_--_FINAL_9.5.13.pdf

³⁸³ Food and Agriculture Organization of the United Nations. FAOSTAT. "Global production and trade of forest products in 2012." 2012. <http://www.fao.org/forestry/statistics/80938/en/>

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³⁸⁵ Food and Agriculture Organization of the United Nations. FAOSTAT. "Global production and trade of forest products in 2012." 2012. <http://www.fao.org/forestry/statistics/80938/en/>

³⁸⁶ Food and Agriculture Organization of the United Nations. FAOSTAT. "Global production and trade of forest products in 2012." 2012. <http://www.fao.org/forestry/statistics/80938/en/>

³⁸⁷ United Nations Environment Programme/INTERPOL. *Green Carbon, Black Trade*. 2012.

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³⁸⁸ Roboredo, Fernando. "Socio-economic, environmental, and governance impacts of illegal logging". *Environment Systems and Decisions* 33 (2013): 2. <http://link.springer.com/article/10.1007%2F10669-013-9444-7>

³⁸⁹ United Nations Environment Programme/INTERPOL. *Green Carbon, Black Trade*. 2012.

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³⁹⁰ US Bureau of Labor Statistics, US Department of Labor. "Logging Workers." *Occupational Outlook Handbook, 2014-15 Edition*. <http://www.bls.gov/ooh/farming-fishing-and-forestry/logging-workers.htm#tab-2>

³⁹¹ Food and Agriculture Organization of the United Nations. *State of the World's Forests 2014*.

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Healthcare

This report focuses on the services provided by the healthcare industry, specifically on the services provided by lower skilled positions that are more vulnerable to human trafficking. For risks associated with healthcare equipment manufacturing, please see the pull out box.

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☐ Long, complex, and/or non-transparent supply chains

Overview of the Healthcare Sector:

The global medical industry incorporates a vast array of services provided by hospitals, nursing homes, diagnostic laboratories, and pharmacies. These institutions employ workers at all professional levels and they are supported by drug, pharmaceutical, chemical, and medical equipment manufacturers and suppliers. Public policy workers, medical writers, clinical research lab workers, IT professionals, sales and marketing professionals and health insurance providers are also connected to the industry.⁴¹⁷ Many, if not most, jobs in the healthcare sector involve skilled forms of labor, and are not generally at risk for human trafficking. Lower-skilled healthcare occupations such as certain forms of nursing, home nursing, and personal care provision may be at risk, however, and are the focus in this report. In addition, human trafficking has been documented in conjunction with the production of certain kinds of medical equipment (see the [Healthcare Equipment Manufacturing](#) pullout box for more information). Equipment involved in healthcare provision is also at risk for trafficking at the level of primary inputs such as metals (see the [Extractives/Mining and Basic Metal Production](#) sector report for more information), electronics (see the [Electronics and Electrical Products Manufacturing](#) sector report for more information), and certain chemical supply chains.

Economy:

The healthcare industry as a whole is one of the world's fastest growing industries, representing over ten percent of most developed nations' gross domestic product.⁴¹⁸ In 2013, the Economist Intelligence Unit (EIU) reported that the global average spent on healthcare as a percentage of GDP was 10.5 percent and was likely to continue at that level in 2014. The EIU estimated that, in 2014, the regional percentages will be as follows: 17.4 percent in North America, 10.7 percent in Western Europe, 8.0 percent in Latin America, 6.6 percent in Asia and Australasia, and 6.4 percent in the Middle East and Africa. In 2013, global health spending was expected to increase by 2.6 percent and then continue to increase by an average of 5.3 percent per year for the next four years.

Due to a combination of increasing life expectancies worldwide and the aging "Baby Boomer" generation in the US, demand for healthcare is rising steadily. In the United States, healthcare spending increased by 3.7 per cent in 2012, bringing total spending to \$2.8 trillion or \$8,915 per person.⁴¹⁹ The overall population of the United States is projected to increase by at least 18 percent between 2000 and 2020, and the population age sixty-five and older is expected to increase at three times that rate, a trend that will lead to a rapid increase in demand for registered nurses (RNs) and other healthcare practitioners. The United States Department of Health and Human Services (HHS) estimated that in 2000 there was a shortage of 111,000 full time equivalent (FTE) RNs in the United States. HHS predicted a shortage of 275,000 in 2010, and estimated that the shortfall will reach 800,000 by 2020.⁴²⁰

Overseas, emerging healthcare market countries include China, India, Indonesia, Russia and Mexico. The fastest growing region in terms of healthcare spending is expected to be the Middle East and Africa. Key factors of growth include population growth and government healthcare access programs.⁴²¹

According to the Health Policy Coordinator at the ILO Social Protection Department, Xenia Scheil-Adlung, there is currently a shortage of around 10.3 million health workers worldwide.⁴²²

Workforce:

According to the World Health Organization, there were around 60 million health workers worldwide in 2010. About two-thirds of these, or 40 million workers, provided health services, while the other one third, 20 million workers, were employed in management or support positions.⁴²³

The Center for Health Workforce Studies' Healthcare Employment Projections (2012) reported that between 2000 and 2010, healthcare employment in the United States increased by more than 25 percent. In 2010, approximately 14 million people were employed in the healthcare sector in the United States. The Center anticipated that between 2010 and 2020, 4.2 million jobs would be created in the healthcare sector, 63 per cent in ambulatory care.⁴²⁴

The United States Bureau of Labor Statistics reported that 18,302,700 people were employed in healthcare and social assistance in December 2014.⁴²⁵ The Bureau broke the sector down into ambulatory healthcare services (6.8 million),⁴²⁶ hospitals (4.8 million),⁴²⁷ nursing and residential care facilities (3.3 million),⁴²⁸ and social assistance (3.4 million).⁴²⁹

Utilizing a different survey, the report focuses mostly on the lower-skilled positions, such as home health aides, personal care aides, nursing assistants, and orderlies, who experience greater risk of human trafficking than skilled healthcare workers. In 2012, there were 875,100 home health aides employed in the United States, 1.2 million personal care aides, 1.5 million nursing assistants (more than half of whom work in nursing and residential care facilities), and 54,600 orderlies. The demand for home health aides is increasing rapidly, in part because of the potential for cost-savings in healthcare delivery represented by a shift to lower-paid home health workers.⁴³⁰ The United States Department of Labor's Bureau of Labor Statistics projects that home health aide employment will grow 48 percent from 2012 to 2022.⁴³¹ By 2018, it is estimated that the direct care workforce will total more than 4 million employees.⁴³²

International migration for healthcare jobs is becoming more and more common as the demand for health workers in "high-income" countries continues to increase. The migration trend tends to be south to north migration of both unskilled and skilled health workers from Africa and Asia to Europe and North America. The "brain drain" associated with the migration of skilled health workers out of the Global South greatly affects the health systems of the source countries. For example, India, Nigeria, and Pakistan have "critical health workforce shortages" but these countries are in the top 25 countries that send doctors and nurses overseas.⁴³³ Countries experience financial loss and sometimes even partial or complete collapse of their health systems. This migration trend is so common in countries like Fiji, Jamaica, Mauritius and the Philippines that students often enter school with the intention of working abroad. The Philippines are now training students especially for international careers because the demand is so high.⁴³⁴

Risks to Human Trafficking in this Sector:

Hazardous/Undesirable Work:

The World Health Organization (WHO) lists the following safety hazards that workers in the healthcare sector face: biological hazards (such as TB, Hepatitis, HIV/AIDS, SARS), chemical hazards (such as glutaraldehyde and ethylene oxide), physical hazards (such as noise, radiation, slips, trips, and falls), ergonomic hazards (such as heavy lifting), psychosocial hazards (such as shift work, violence, and stress),

fire and explosion hazards (such as oxygen and alcohol sanitizing gels), and electrical hazards (such as frayed electrical cords).⁴³⁵ Physical injury rates are reportedly thirty times higher in the healthcare field than in other sectors.⁴³⁶ Further, time constraints placed on health-care providers can increase the risk of physical harm.⁴³⁷

Workers in lower positions such as home healthcare aides face additional undesirable and hazardous tasks such as bathing and cleaning patients, working with potentially volatile and sometimes violent patients, and responsibility for cleaning facilities or patient's homes. Home health aides and personal care aides often work in clients' private residences.⁴³⁸ The associated invisibility and isolation adds an additional layer of vulnerability to exploitation and abuse; experts report that hospice and home healthcare workers frequently face serious safety risks, and that the problem is severely underreported.

In addition to physical risk, healthcare workers may be subject to psychological abuse and harassment.⁴³⁹ According to research conducted by the New Orleans Family Justice Center, 60 percent of community nurses have experienced verbal or other forms of abuse on the job in the past two years, mainly from family and friends of the patients. In general, the survey participants were largely unaware of policies and procedures concerning abuse at work, and 20 percent said they weren't sure if their employers would do anything if they reported the abuse. Eighty percent of participants said that they did not report incidents to their employers.⁴⁴⁰ Such exploitive conditions can create a culture of intimidation for workers, particularly when they are also marginalized due to gender, ethnicity, or migration status. Intimidated workers may fear expressing any grievances regarding their working conditions.

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

In the United States, the rapid growth in healthcare employment has been concentrated in growth of low-skilled healthcare positions such as home healthcare aides, nursing aides, medical assistants, and orderlies. Over 60 percent of healthcare workers now have less education than a four year degree. The demand for these lower-skilled workers has been driven by the need to rapidly staff up for care of the aging population in the US.⁴⁴¹

Many of these jobs have low barriers to entry. While some positions, such as pre-baccalaureate registered nurses (RNs) require associate degrees or other post-secondary education, other positions such as home health aides may not even require a high school diploma.⁴⁴²

These low-skilled jobs with low educational barriers to entry also tend to be relatively low-paying. Most of the new jobs in the sector pay less than \$30,000 a year. Home health care workers in the United States usually make \$8.03 to \$14.17 an hour and have historically been exempt from minimum wage and overtime laws. The Department of Labor recently issued a final rule extending minimum wage and overtime protections to home care workers, but litigation regarding the rule is pending. There are reports that almost 40 percent of health aides are on government assistance programs, like food stamps and Medicaid.⁴⁴³ In 2014, a group of health aides in California filed a class-action lawsuit alleging that their employer underpaid wages. Workers reported that they were paid flat fees for 12 or 24 hour shifts, leaving their per hour rate far below the minimum wage.⁴⁴⁴

The worker population engaged in low-skilled healthcare work tends to have vulnerabilities tied to gender, ethnic background and migration status. Racial and ethnic minorities are disproportionately represented in these positions; In the United States, almost thirty percent of all in-home healthcare workers are immigrants.⁴⁴⁵ Migrant workers are particularly prevalent among nurses, personal care aides, psychiatric aides and home health aides.⁴⁴⁶ One in five immigrant direct care workers is undocumented, further increasing their vulnerability to exploitation and abuse.⁴⁴⁷ Fifty-six percent of in-home healthcare workers are from a minority racial or ethnic group.⁴⁴⁸ According to the Obama administration, close to 30 percent of home healthcare workers are black and 12 percent are Latino.⁴⁴⁹ Low-skilled health workers

are predominantly female. Approximately 92 percent of home healthcare workers are women.⁴⁵⁰ Women in these positions have been found to make considerably less than women in other jobs: \$308 weekly median compared to \$560 in other professions.⁴⁵¹ In general, migrant workers, black and Hispanic workers, and women are clustered in the lowest paid healthcare professions with the lowest educational barriers to entry. These positions are often the most hazardous healthcare positions, and are associated with other poor conditions of work.

Migrant Workforce:

The United States relies on a large number of foreign healthcare workers. According to the Pew Research Center, there were 11.6 million native born employees and 2.1 million foreign born employees in the healthcare sector in the United States in 2012. Of these 2.1 million foreign born employees, a large majority come from South and East Asia (782,204). The next largest groups of foreign born employees migrated from the Caribbean (369,711), Mexico (169,669), and South America (142,162).⁴⁵² Between 2001 and 2008, an estimated one-third of the 476,000 full-time RNs in the United States were foreign born. Migrant health-care workers tend to receive lower wages: one study found that hiring a foreign-educated nurse instead of a native, per-diem nurse could save a company up to \$50,000 in two years.⁴⁵³ In Kuwait, the United Arab Emirates, and other countries in the Middle East, migrants make up more than 50 per cent of healthcare employees.⁴⁵⁴

Migrants are likely paid less than equivalent domestic healthcare workers. An article on migrant nurses in Dubai noted that Filipino nurses are paid less than half of the rate of nurses from Dubai.⁴⁵⁵ In some cases, migrant healthcare workers in conflict areas may be vulnerable to violence. In one well-publicized case, 40 female nurses from India were trapped in an area of Iraq attacked by armed members of the 'Islamic State.'⁴⁵⁶ Similarly, over 400 Indian nurses were trapped by militia violence in Libya.⁴⁵⁷

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in Labor Supply Chain:

Migrant health-care workers in the United States and other developed countries, including nurses in particular, are recruited via firms specializing in health-care recruitment.⁴⁵⁸ A 2003 survey by the National Council of State Boards of Nursing (NCSBN) found that 35 percent of foreign-educated RNs and 17 percent of foreign-education Licensed Nurse Practitioners (LNPs) and vocational nurses used a recruiting agency to get their jobs.⁴⁵⁹ In addition to direct recruitment of foreign nurses by healthcare organizations, one study found two primary models of foreign nurse recruitment: in the first model, foreign nurses are recruited by placement agencies and then directly employed by the healthcare organization; in the second model, the recruitment agency also acts as the employer and "leases" the nurse to the healthcare organization.⁴⁶⁰

Recruitment conditions can increase foreign healthcare workers' vulnerability to human trafficking. A small percentage of recruitment agencies charge applicants fees for placement, potentially increasing their vulnerability to debt bondage, in the event that the fees charged are high in comparison to earnings.⁴⁶¹ More significantly, foreign nurses recruited by staffing agencies are generally contractually tied to their employer for a period between 18 and 36 months. In some cases, these contracts state that, if they wish to pre-terminate their contracts, foreign nurses must repay all expenses borne by recruiter in addition to paying a penalty of as much as \$50,000, according to some reports.⁴⁶² Although salaries for nurses tend to be relatively high compared to wages for positions such as home healthcare aides, placement agencies can take up to 50 percent of a foreign nurse's salary.⁴⁶³

These recruitment conditions can facilitate vulnerability to human trafficking, even for these relatively skilled workers. In one recent case, a man was accused of luring foreign nurses, mostly from the Philippines, to Colorado with promises of salaries from \$68,000 to \$72,000. Prosecutors said that once the nurses arrived, the defendant demanded \$1,200 a month from each recruited nurse and threatened to revoke their H-1B visas if they refused.⁴⁶⁴ One recruited nurse reported that the man promised her a

university teaching job that didn't exist and required up-front fees of up to \$10,000. He was also always threatening to deport the nurses if they broke their contracts. The accused man was convicted of human trafficking and sentenced to 11 years in prison.⁴⁶⁵

In another recent case, *Panwar v. Access Therapies, Inc.*, a number of people from India and the Philippines were recruited to work for healthcare companies through the H-1B visa program (see the [Guestworker Visas](#) pullout box for more information on visa programs). The defendants in this case allegedly used coercion, threats of visa revocation, and threats of financial penalties and debt, specifically the \$20,000 promissory note that the employees were forced to sign, to trap the workers in their employment.⁴⁶⁶

Healthcare Equipment Manufacturing

This pullout box focuses on the labor used to create the equipment used in the healthcare sector. For more information on the human trafficking risks associated with the inputs to equipment manufacturing, see the [Extractives/Mining and Basic Metal Production](#) and the [Electronics and Electrical Products Manufacturing](#) sector reports and the related commodity reports.

Medical equipment or devices refers to products that are “designed to diagnose and treat patients.” Medical equipment ranges from tongue depressors and bandages to pacemakers and complex imaging systems. Medical equipment may be divided into the following principal product categories: surgical appliances and supplies, surgical and medical instruments, electro-medical equipment, in-vitro diagnostic substances, irradiation apparatuses, and dental and ophthalmic goods.⁴⁶⁷

The United States was the world's largest producer of medical equipment in 2008 with a market valued at over \$100 billion, which was 42 percent of the world's total medical equipment market at that time. United States exports totaled \$31.4 billion in 2008. The United States is also the world's largest consumer of medical equipment with imports valued at \$33.6 billion in 2008. Most of these imports are “lower tech products,” like scalpels and surgical gloves.⁴⁶⁸

The United States medical equipment manufacturing industry presents a low risk of human trafficking due to the small average company size, the high skill level required for the job, and the relatively high compensation level. In 2007, there were approximately 5,300 companies manufacturing medical equipment in the United States, and 73 percent had fewer than 20 employees, with average wages of \$60,000.⁴⁶⁹ Most pieces of medical equipment manufactured in the United States are relatively complex, high value-added products, and the labor involved is not of concern for trafficking risk, except at the level of primary commodity and electronics inputs.

According to the UN Comtrade database, however, in 2013 the United States imported \$2.4 billion worth of “Instruments etc for medical, surgical, dental, etc. use” from Japan, almost \$2.3 billion from Germany and \$2.1 billion from China. Japan and Germany do not in themselves raise significant red flags for human trafficking risk, but these countries both source medical instruments from Pakistan, a country cited by the United States Department of Labor's *List of Goods Produced by Child Labor or Forced Labor* (2013) for producing surgical instruments with child labor.

Children as young as eight have been found making surgical instruments, such as scalpels, clamps, and scissors, in Pakistan. These children work in dangerous conditions without protective equipment and injury is common. Wages are low; some workers are only making INR 170 (\$3.4 in 2008) a day. The city of Sialkot is the center of Pakistan's surgical instrument manufacturing industry. The ILO has estimated that 5,800 children work in the industry in Sialkot.⁴⁷⁰ Some children are reportedly involved in the industry to pay off family debts that were owed to the employer. The manufacturers that provide these

products to large international health companies often sub-contract production to small, informal production workshops where compliance standards are more difficult to enforce. These conditions are often hidden from the large companies that purchase the products as the supply chain is long and lacks transparency. Britain's National Health Services was a major buyer of surgical instruments from Sialkot, Pakistan and has since developed draft guidelines on ethical purchasing to try and prevent future purchases tainted with labor abuses.⁴⁷¹

Pakistan's top five exporting partners for "instruments etc for medical, surgical, dental, etc use" are: China (\$43 million), Singapore (\$25 million), Germany (\$23 million), United States (\$12.9 million), and Japan (\$10.4 million).⁴⁷² The import of medical instruments by the United States suggests a risk of child labor for federal supply chains.

Medical equipment made in China may also pose a risk for human trafficking in United States supply chains. China has recently come under scrutiny for its use of compulsory labor in its prisons. A 2005 BBC News Article states that Chinese prisoners "produce everything from green tea to coal, paperclips to footballs, medical gloves to high-grade optical equipment" (see the [Prison Labor in Federal Supply Chains](#) pullout box for more information).⁴⁷³

Federal Procurement in the Healthcare Sector:⁹

The vast majority of federal healthcare purchases are made by the Department of Veterans' Affairs and the agencies of the Department of Defense.

Among categories of healthcare expenditures at particular risk for human trafficking are spending on home nursing care, and expenditures on low-tech medical and dental equipment. In FY2013, the United States spent approximately \$369 million on home care nursing contracts (PSC Q402), nearly all of which was contracted by the Department of Veterans' Affairs. The United States spent about \$3.964 billion (in more than 140,000 separate new contracts) on medical, surgical, and dental instruments, equipment, and supplies (PSC 6515 and 6520) in FY2013. One 2013 contract from the VA sourced \$45,000 in surgical instruments directly from Pakistan, despite these being on the United States Department of Labor's list of goods known to be produced with child labor.

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Hospitality

This report covers services that are provided in the hotel, foodservice, and tourism industries. The products that are involved in the administering of these services are not addressed in this report. For information on the human trafficking risks associated with the production of these products, see the forthcoming sector reports: [Agriculture](#), [Construction](#), [Extractives/Mining and Basic Metal Production](#), [Electronics and Electrical Products Manufacturing](#), [Fishing and Aquaculture](#), [Textile and Apparel Manufacturing](#), and [Transportation and Warehousing](#). Services closely related to hospitality, such as janitorial and laundry services, are discussed in the [Housekeeping/Facilities Operation](#) sector report.

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☐ Long, complex, and/or non-transparent supply chains

Overview of the Hospitality Sector:

The hospitality sector is defined differently by different authorities. The ILO refers to the Hotels, Catering and Tourism Sector; the World Travel & Tourism Council refers to the Travel & Tourism sector; and the United States Department of Labor refers to the Leisure and Hospitality sector. In this report, Verité uses the term “Hospitality Sector” to refer to those industries that provide food, accommodation, tourism, and leisure services, and in particular focuses on the hotel, foodservice, and tourism industries. As a service-based industry, delivery of hospitality is by nature localized. The relevant supply chain considerations relate primarily to the supply of labor to the sector, while other related inputs, such as food, buildings, and transport are addressed in the analysis of Agriculture, Construction, Transportation, and other relevant sectors. Janitorial and laundry services more broadly are also discussed in the Housekeeping/Facilities Operation sector report.

The hotel industry comprises commercial establishments that provide temporary lodging. Hotels range widely in size and quality, but most are of moderate scale (under a hundred beds), with nearly half the industry’s workforce employed in relatively small hotel enterprises.⁴⁷⁴ In developed countries, many hotels operate as part of chain or franchise consortiums, sharing brands, marketing, architectural design, and management strategies with a network of related enterprises, which is sometimes extensive. Other hotels (both smaller and larger) operate independently, although the industry is dominated by the large chains, particularly in North America.⁴⁷⁵

The foodservice industry is very broad, encompassing both restaurants and contract catering providers. Independent sit-down restaurants are most often owned by private individuals, but fast food and chain restaurants are generally owned by large, often transnational, companies. The contract catering industry is dominated by three major corporations (Compass Group PLC, Sodexo Group, and Aramark) who together employ 1 million workers in up to 90 different countries. A small number of transnational catering companies also control transportation-related catering, such as catering on airlines and railways. Contract catering firms provide foodservice to hotels, schools, hospitals, military bases, prisons, industrial worksites, and other institutional settings, and account for as much as half the food consumed outside the home in some countries.⁴⁷⁶ The contract catering industry is growing steadily, reflecting increased global demand for outsourcing of services generally, as well as changing social and workplace cultures.⁴⁷⁷

The tourism industry provides services to both travelers and residents engaging in temporary leisured activities, often away from home. Tourism providers include travel agencies, tour operators, tour guides, cruise ship companies, theme parks, medical/wellness retreats, and providers of recreational and leisure activities. The industry also employs marketing and facilities management personnel. For the purposes of this report, personal care service providers, such as workers in nail salons and beauty parlors, are included as part of the tourism service industry.

Employment in the hospitality sector has become increasingly “fissured.” That is, according to David Weil in his 2011 book, “the lead firms that collectively determine the product market conditions in which wages and conditions are set have become separated from the actual employment of the workers who provide goods or services.”⁴⁷⁸ This fissuring plays out in a variety of ways. Franchised businesses are increasingly common across the hospitality sector, most notably in hotels and restaurants. In the franchise model, the franchisor (often a large, multi-national company), sells rights to use its brand to a franchisee (an individual business owner, or, increasingly, an incorporated business or trust). The franchisee agrees to follow the franchisor’s business model, including standards that may impact conditions of work for employees -- and to pay royalties or fees.⁴⁷⁹ Employees of a franchised business have no direct employment relationship with the franchisor brand.

Workers are also “fissured” from hospitality brands by the use third-party staffing agencies that recruit, hire and manage workers. Third-party agencies commonly provide staff to hotels, including housekeeping, janitorial services, security, valet, grounds and landscaping, food and beverage, and laundry.⁴⁸⁰ Outsourced staffers are increasingly replacing directly-employed employees in many hotels. Workers hired through agencies may also be considered temporary employees even though they have worked at the venue for many years.⁴⁸¹ Workers on cruise ships are also commonly recruited and/or managed via third-party agencies.⁴⁸² In some cases, hospitality workers may work at multiple layers of remove from the multi-national hospitality companies they ostensibly work for – for example, a worker at a franchised hotel who is managed by a third-party logistics provider.⁴⁸³

These “fissured” arrangements have several implications for workers’ vulnerability to human trafficking. First, workers lack direct employment relationships with the entities that exert control over their immediate working conditions. This lack of a direct employment relationship undermines opportunities for workers to express grievances, and also limits the ability and incentive for businesses to comply with relevant labor standards. Further, the outsourcing trend itself increases the economic pressure on the actual employers of workers – whether they be franchise owners or third-party suppliers – to limit labor costs in order to maintain their competitiveness, further raising the risk that workers will be exploited or even trafficked.⁴⁸⁴

Economy:

The hospitality sector is one of the fastest growing components of the contemporary global economy, with growth across all sub-sector industries, but led by particularly robust growth in the global tourism industry. The World Travel & Tourism Council’s (WTTC) *Economic Impact Analysis* reports that Travel & Tourism’s contribution to the world economy at 9.5 percent of global GDP in 2013, or \$7 trillion (2013 prices). The travel and tourism sector generated approximately 4.7 million new jobs worldwide last year, supporting “nearly 266 million people in employment – that’s 1 in 11 jobs on the planet.”⁴⁸⁵ The sector attracted \$754 billion in investment in 2013 (4.4 percent of total investment) and generated \$2.3 trillion in exports (5.4 percent of world exports). The WTTC expects 2014 numbers to be even more impressive with an expected GDP contribution growth of 4.3 percent.⁴⁸⁶ The United Nations’ World Tourism Organization (UNWTO) estimates 2014 international tourism earnings alone at \$1.4 trillion, making tourism the world’s fifth largest export sector (after fuels, chemicals, food and automotive products), and notes that international tourism ranks first in export earnings many developing countries.⁴⁸⁷

Geographically, Southeast Asia was the region with the fastest growth in the sector in terms of GDP and employment contributions in 2013. Within this region, Thailand, Indonesia, Singapore, and Burma were the strongest performing countries. Overall, the countries with the fastest growth in terms of GDP contribution were The Gambia, Georgia, Qatar, Hong Kong, and Thailand. Syria, Mali, and Egypt were the countries with the greatest decline in contribution, reflecting ongoing conflict in these countries. Italy, France, and Germany also experienced declines in contribution in 2013 due to lingering effects of the economic recession.⁴⁸⁸

Workforce:

Work in the hospitality sector ranges from specialized and skilled jobs such as tour guiding and senior chef positions, to low-skilled and relatively unpleasant jobs such as dishwashing. Hotel industry jobs include front desk, valet, concierge, wait staff, bartender, housekeeping staff, room service staff, spa and recreation staff, security staff, maintenance & engineering staff, information technology staff, and hotel management staff. Catering industry positions include cooks/chefs, dishwashers, wait staff, bartenders, cashiers, hostesses, drivers, and managers. The tourism industry includes a wide range of jobs, from desk clerks or drivers at tour companies, dish washers on cruise ships, and maintenance crews at theme parks, to massage therapists at spas and manicurists at nail salons.

While some skilled and specialized jobs, such as gourmet chefs or hotel management, do exist in the hospitality sector, most positions are relatively low-skilled and poorly paid. In the US, 14.9 million people were employed in December 2014 in what is referred to by the United States Bureau of Labor Statistics as the Leisure and Hospitality sector. Of these, 13.1 million worked in production and nonsupervisory roles.⁴⁸⁹ According to a 2012 United States Department of Labor report, 3.6 million workers in the United States Leisure and Hospitality sector earn an hourly wage at or below the federal minimum wage of \$7.25 an hour, although workers in restaurants and catering do sometimes receive tips as well.⁴⁹⁰ Median weekly earnings for full time workers in the sector were \$492 in 2013; weekly earnings by union members were somewhat higher, at \$605. Union participation in this sector is very low, however, at only 2.7 percent in 2013.⁴⁹¹ Allegations of union-busting by major hotel chains have been made, and the trend toward outsourcing is accelerating.⁴⁹²

There is high staff turnover in the hotel, restaurant, and tourism industries, attributed to the lack of job stability (the sector is very vulnerable to market fluctuations, and workers may be laid off on short notice), the irregular hours, the lack of opportunities for upward mobility, and the generally low pay.⁴⁹³ According to the ILO, the tourism industry employs a large number of part-time, temporary, and seasonal workers, many of whom are subcontracted or outsourced.⁴⁹⁴ Due to the low skill and language requirements associated with much hospitality work, many migrants, young people, and women initially find work in the hospitality sector, often hoping later to leverage such experience to gain eventual entrance into a more secure or desirable form of employment.⁴⁹⁵ Hotel and restaurant employees often make up a substantial percentage of overall migrant populations in destination countries. For example, OECD data from 2009 showed that hotel and restaurant workers made up nearly 15 percent of the entire migrant workforce in Spain, and nearly nine percent in the United Kingdom.⁴⁹⁶

Risks to Human Trafficking in this Sector:

The United States Department of State's 2014 *Trafficking in Persons Report* noted evidence of human trafficking in the hospitality sector in the following countries: Australia, Argentina, Belgium, Belize, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Chile, Cote d'Ivoire, Cyprus, Denmark, Gabon, Georgia; Germany, Fiji, Finland, Ireland, Italy, Iceland, Luxembourg, Macedonia, New Zealand, Niger, Palau, Panama, Portugal, Romania, Singapore, South Sudan, Sweden, Switzerland, Uganda, United States, Vietnam, and Zimbabwe.⁴⁹⁷

While many examples of human trafficking occur overseas, the problem is also reported in the United States. One example, *Juana Sierra Trejo v. Broadway Plaza Hotel*, involved a situation in which five employees were hired to clean rooms at a hotel for eight hours a day, six days a week, with a salary of approximately \$250 a week. However, when the employees began work, they were routinely made to work seven days per week and often for 15 hours per day without meal or bathroom breaks. After work hours, the employees were also made to clean the personal homes of their employers and to run errands for them as well. The employees were never paid overtime, were denied time off, and were sexually harassed, verbally abused, and threatened with deportation. The two parties eventually settled the case.⁴⁹⁸

Hazardous/Undesirable Work:

Work in the hospitality sector can be very demanding and even hazardous. Jobs often require employees to endure long periods of standing and/or walking, and may also include carrying heavy loads. The work can also be extremely dirty. Specific jobs, like dishwashing, hotel cleaning, and cruise ship maintenance, have frequent exposure to water and harsh cleaning products and other chemicals. Kitchen employees working in restaurants, catering, cruise kitchens, or hotels are exposed to a variety of dangerous equipment that can result in cuts and burns. Hotel housekeepers report injuries from tasks such as lifting heavy mattresses, particularly under tight time constraints. Many workers in the hospitality sector have strict quotas to complete on each shift.⁴⁹⁹ Hotel housekeepers, for example, are often required to clean up to 20 rooms per day.⁵⁰⁰ The average hotel laundry worker handles over two tons of laundry per day⁵⁰¹ which can lead to severe skeletomuscular pain and disorders. A 2006 study by the union Unite Here! found that hotel housekeepers were "more than 48 percent more likely to be injured on the job than the typical service worker" and more than 51 percent more likely to experience disabling injuries.⁵⁰² The same study reported that hotel housekeepers experience an injury rate 86 percent higher than non-housekeeper hotel staff.

Violence and harassment from management as well as customers has been reported in association with this sector as well.⁵⁰³ The United States Department of Labor's Bureau of Labor Statistics reports that there were 245 work-related fatalities in the Leisure and Hospitality sector in 2012, 238 fatalities in 2011, 254 in 2010, and 238 in 2009, although it does not detail how the fatalities occurred.⁵⁰⁴

Sexual harassment and abuse are particular dangers for women working in hospitality and service sectors. Many positions in the sector place a premium on satisfaction of all customer expectations. Many female workers are therefore expected to appear socially friendly and attractive to customers, which can lead to instances of abuse, harassment or assault from both customers and employers.⁵⁰⁵

Sexual harassment, sexual violence, and forced commercial sexual exploitation are particular dangers for women and children in conjunction with the development of tourism industry establishments and certain leisure facilities.

Even in the absence of violence or other physical hardship, working conditions and remuneration in the hospitality sector can be very poor. In 2011, the organization Restaurant Opportunities Centers (ROC) United released a report entitled *Behind the Kitchen Door: A Multi-site Study of the Restaurant Industry*.⁵⁰⁶ The study surveyed employers and employees of the restaurant industry in eight regions in the United States. The study found that the average yearly income for restaurant workers was far below that of the rest of the private sector: restaurant workers made \$15,092 in 2009, compared to the average private sector worker, who made \$45,155. The study also found that 87.7 percent of restaurant workers do not have paid sick days and 46.3 percent of workers experienced overtime violations. There is also widespread racial discrimination reported in the industry, with white workers making a median wage of \$13.25 and workers of color making \$9.54.⁵⁰⁷ Kitchen staff, dishwashers and cooks also frequently work over 70 hours a week for very little pay.⁵⁰⁸

Internationally, many working conditions in the sector are also often poor. The organization Tourism Concern, with support from the International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations (IUF), issued a report in 2013 on working conditions in hotels in Barbados, Kenya, and Tenerife, Canary Islands. Through a combination of desk research, respondent questionnaires and stakeholder interviews, it was found that hotel staff in all types of hotels experienced low wages and "unfavorable working conditions," including irregular work hours, stress, and exposure to risk. Hotel staff in "all-inclusive" hotels (hotels that include food, entertainment, and tourist activities in the price) endured working conditions that were even more undesirable. Poor conditions faced by workers in the study included short term contracts, few benefits, low job security, low overall wages (due in part to the lower occurrence of tipping), and unpaid overtime.⁵⁰⁹

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

Reflecting the low-paid, low-status, and difficult nature of the work most often associated with the hospitality sector, many of the employees who work in restaurant, hotel, and tourism jobs do so because they are relatively impoverished and have few options for better employment due to lack of skills or other resources.

Lower-level positions within the hospitality sector often require little training, language fluency, or formal education, making them accessible to workers such as poor women, children, less-educated migrants, and undocumented migrants, all of whom are more vulnerable to being trafficked than their more prosperous or empowered counterparts in higher-level positions within the sector. The 2013 Trafficking in Persons Report notes that women employed in the hospitality sector tend to be concentrated in "low paid, low status and non-managerial positions,"⁵¹⁰ as do migrants from poorer, less-developed countries.⁵¹¹ Among migrant workers in the hospitality sector in Australia and New Zealand, for example, Asian employees tend to fill the well-paid managerial positions, while migrants from the Pacific Islands routinely fill the low level positions.⁵¹² In many Asian hotels, executive and technical positions are filled by migrants from Europe, North America, Australasia, and Japan, while non-executive, low-skilled jobs are usually filled through in-country, in-region migration.⁵¹³ Migrant women make up the majority of hotel housekeepers in the United States for example, one of the lowest paid, lowest skilled positions.⁵¹⁴ The employees hired for executive and technical positions are less vulnerable due to their higher skill level, making them less easily replaced, and therefore more able to advocate for themselves. Migrants from wealthier nations generally also have relatively more resources, and hence more options in the face of unfavorable working situations.

Women in the hospitality industry may face an added risk of trafficking in conjunction with commercial sexual exploitation, often in the context of hostess clubs, strip clubs, or other similar establishments. Victims of labor trafficking in these clubs are typically forced to dance and/or serve food and drink, and may at times also be forced into prostitution. Russian stripping networks often traffic women from Eastern Europe and Russia to the United States where they are then controlled by club owners who can move them around to multiple clubs. Asian hostess clubs or "room salons" and Latino "cantinas" may also have ties to trafficking. These clubs are often tied to organized crime, which adds another layer of fear and coercion.⁵¹⁵

Children and undocumented migrants are often particularly vulnerable to exploitation, as in recent cases of children being forced to work in restaurants in both Uganda and Vietnam,⁵¹⁶ and a recent legal case in the United States in which a group of 11 men were indicted for forcing undocumented Mexican immigrants to work in seven Mexican restaurants in New York, Pennsylvania, and West Virginia, by holding over them threat of deportation.⁵¹⁷ Another category of vulnerable workers in the hospitality industry are those employed on cruise ships, where, as is also true in the fishing and deep sea transport sectors, workers have no possibility of escape from an abusive situation while the ships are at sea. In April 2014, 11 crew members, working in "slave-like conditions" on board the Italian owned MSC

Magnifica cruise ship, were rescued by Brazilian police. The employees were forced to work up to 16 hours a day and some were allegedly victims of sexual harassment. Employees on cruise ships are especially vulnerable to labor abuses because the laws governing cruise ships are vague due to the fact that they operate in international waters and vessels are often registered under “flags of convenience” in countries where the costs and regulatory requirements are low.⁵¹⁸ In addition to fees paid to staffing agencies to secure their jobs, workers may also be required to lodge “runaway” deposits or bonds as a means to prevent workers from attempting to escape the ship in port.⁵¹⁹

Migrant Workforce:

The preponderance of migrant labor within the hospitality sector is a significant risk factor for trafficking, for many of the reasons already noted above. Much of the vulnerability faced by migrant workers in the sector derives at least in part from the structural circumstances that all migrants face, being far from home in unfamiliar cultural and often linguistic contexts, and cut off from support networks and other social resources, all of which contribute to their likelihood of being exploited by unscrupulous middlemen or employers. Migrant hospitality workers often end up dependent on such labor intermediaries not only for their job placements, but also for their visas, work permits, housing, and other essentials, leaving them vulnerable to manipulation and exploitation, including human trafficking.

In a recent example from the US, *United States v. Sophia Manuel*, 39 Filipino migrants were forced to work in country clubs and hotels in Florida. The workers were forced into debt with false promises, had their passports confiscated upon arrival, were threatened with deportation, and were forced to live in substandard housing with little food. The workers were not allowed to leave the premises without an escort and they were paid very little or nothing for their work. The two defendants were eventually sentenced to 51 and 78 months in prison.⁵²⁰

Most migrant workers in the United States hospitality industry are of Latin American origin, where push factors in the sending country such as poverty, political instability, and trafficking by organized criminal networks have driven migrants to seek low-skilled hotel and restaurant jobs in the US.⁵²¹ Once in the US, the structure of US immigration and visa policy often further contributes to their vulnerability to trafficking, by making it virtually impossible for them to change jobs legally if they find themselves in untenable or illegal working situations (see the [Guestworker Visas](#) pullout box for more information).

The hospitality sector in the United States is also heavily dependent on young, university-age foreign guest workers participating in the “Summer Work Travel Program,” which is one of several types of J-1 visas for temporary workers and other visitors. The program is sponsored by the United States Department of State to promote cultural exchange, but has also served as a source of low-cost labor for hotels, camps, restaurants, shops and other businesses that rely heavily on short term summer labor. Abuses of these workers have also been documented, including young foreign workers who face high, illegal fees to secure their J-1 visas, and encounter work conditions and pay starkly different from what was promised, substandard living conditions, harassment, and other issues that can potentially facilitate human trafficking.⁵²²

Significant numbers of migrants from Asia also seek work in the hospitality sector abroad. One particularly large out-flow of Asian workers is to the United Arab Emirates (UAE), which has a booming hotel and tourism industry.⁵²³ The UAE is notoriously reliant on migrant labor in order to sustain its rapid rate of economic growth and high standard of living: 7.8 million people out of a total population of 9.2 million in UAE are migrants. The temporary guest worker program in UAE, called the Kafala Sponsorship System, ties migrants’ immigration status to their employment by a particular employer, an arrangement that renders workers highly dependent on their employers, and increases opportunities for migrant labor abuses. The UAE has recently sought to reform the Kafala system in response to concerns

voiced about such abuses, but “human-rights and migrant organizations maintain that abusive labor practices have persisted at alarming rates, largely due to poor enforcement.”⁵²⁴

Migrants may also be exploited in the hospitality industry as a result of their ethnic difference or minority status. A recent report by the Joseph Rowntree Foundation looked at human trafficking in the British food industry, including agriculture, food processing, and catering. In the report, migrant workers interviewed reported upfront fees and debt bondage, threats and bullying, disciplining through dismissal and threats of denunciation, productivity targets and workplace surveillance, overwork, no breaks or holiday, non- and underpayment of wages, underwork and indebtedness, deductions and charges, and passport retention. The report highlighted particularly long hours for Chinese workers in what it termed “minority ethnic catering.”⁵²⁵

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in Labor Supply Chains:

Because the hospitality sector has historically attracted a large percentage of migrant workers, international labor brokers, recruitment agents, and other middlemen often play a role in the supply of labor to the sector. As noted in the discussion of risk factors for human trafficking in [Section II](#) above, the presence of such middlemen in labor supply chains represents an inherent risk factor for trafficking, due to the likelihood of workers becoming indebted or otherwise dependent on them in the course of their recruitment and job placement.

Domestic hospitality workers may be recruited, hired, and managed by third-party staffing agencies. These third-party agencies allow companies to avoid direct employment relationships with workers and to maintain a highly flexible workforce. Third-party agencies commonly provide staff to hotels and other hospitality venues such as event venues for functions including housekeeping, janitorial services, security, valet, grounds and landscaping, food and beverage, and laundry.⁵²⁶ Although workers are managed, supervised and paid by the third-party agencies, in some cases, the hotel sets standards and conditions of work, often including quotas.⁵²⁷

Restaurant workers may also be recruited by employment agencies. In Canada, workers from Belize were recruited by an employment agency to work in a McDonalds franchise restaurant. The workers reported that they were promised high wages and no fees to secure their jobs, but pay was lower than expected and they were not reimbursed for fees they paid as promised. Further, upon arrival, they were required to live in expensive apartments, for which their employer had signed a lease, far from their worksite. One foreign worker was fired after speaking to the media.⁵²⁸

Such risk is exacerbated further in situations where the middlemen facilitating the placement of migrants in hospitality jobs overseas are affiliated with organized criminal networks. In one recent case, two employment agencies operating out of Houston were shut down for their involvement in an alleged human smuggling ring. The agencies recruited undocumented migrants, mostly from Mexico and Central America, to work in Chinese restaurants in Texas, Louisiana, Maine, and a number of other states. The workers were paid below minimum wage, worked up to 12 hours a day, six days a week, and were housed in cramped accommodations. The workers were also moved around to different states based on requests from clients of the recruitment agencies.⁵²⁹ In Australia, migrants from the Pacific Islands, India, China, South Korea, and the Philippines are often forced by their employment agents to work in hospitality, among other sectors. Traffickers in Australia are often associated with organized crime networks that have business connections overseas, enabling them to abuse the legal system to prevent victims who contact authorities from actually receiving help. Trafficked men and women in Australia face ID confiscation, confinement, debt bondage, and threats of physical harm. Students in Australia on student visas, particularly Asian students, are especially vulnerable to such trafficking.⁵³⁰

A 2013 account in the UK Sunday Times reported that Vietnamese migrants were being forced to work in “nail bars” in the UK, of which there are an estimated 30,000. Migrants were reportedly promised high wages and charged large smuggling fees to crime syndicates in order to get into the country. Once they arrived, they were forced to work for years to pay back their debt. Since 2008, raids were conducted in 100 nail bars in the countries. One hundred and fifty illegal immigrants were discovered, but experts say that the actual number of Vietnamese trafficked into work in nail bars is much higher.⁵³¹

Even when organized criminal rings are not involved, migrants in the hospitality sector are still vulnerable to human trafficking when brokers or other middlemen are involved. Migrant workers in restaurants and hotels in countries as varied as Denmark, Singapore, and Palau have all reported experiencing deceptive recruitment, debt bondage, withholding of wages, threats of deportation, confiscation of passports, and physical and sexual abuse.⁵³²

Federal Procurement in the Hospitality Sector:¹⁰

The United States Federal Government procures services within the hospitality sector in a variety of ways. Hotel and motel accommodation and travel-related services are purchased by many federal agencies, as military and civilian government personnel travel for meetings, conferences, relocation, or other work-related reasons. Hotel/motel services are also procured by the United States Government in the course of hosting conferences and providing temporary shelter to disaster victims. The various departments of the military, the Department of State, and FEMA are particularly big consumers of hotel/motel services.

In FY2013, the federal spend included net contracts worth \$246 million on lodging while traveling (PSC V231), and \$26 million on travel agent services (PSC V302). The United States spent \$39 million on leasing/renting conference facilities (PSC X1AB) in FY2013.

Expenditures on restaurants are not distinguished from contracts for institutional foodservice (for prisons, hospitals, military bases, federally-sponsored conferences and the like) within the PSC code system, and are therefore not possible to isolate as an element of the overall federal spend. Many, if not most, incidental government expenditures on restaurants may in fact be paid for with purchase cards, per diems, or other informal means, rather than contracted in advance, and therefore not tracked within the Federal Procurement Data System. Contract catering (PSC S203), however, is a significant element of the federal spend. Institutional foodservice contracts totaled \$1.07 billion in FY2013, though some contracts coded with PSC S203 appear to be food purchases (meat, produce, baked goods), so this number is probably somewhat high. Top foodservice providers often involve state-run vocational/disability rehabilitation and training programs.

⁴⁷⁴ International Labor Organization (ILO). *Sectoral Brief: Hotels, catering and tourism. Employment*. http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/briefingnote/wcms_162187.pdf

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⁴⁷⁷ PR Newswire-PRF, “Global Contract Catering Market (Foodservice) 2014 Report, *Marketwatch*, April 28, 2014. <http://www.marketwatch.com/story/global-contract-catering-market-foodservice-2014-report-2014-04-28-8183300>.

¹⁰ All federal procurement data is drawn from the [Federal Procurement Data System](#). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

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Housekeeping/Facilities Operation

This report covers the services involved in the basic operation and maintenance of facilities, including janitorial, laundry, guarding/security, and waste management services, as well as ground maintenance. Products utilized in the implementation of these services broadly include cleaning supplies, equipment, and vehicles. For more information on the human trafficking risks associated with the production of these products, see the forthcoming sector reports: [Extractives/Mining and Basic Metal Production](#), [Electronics and Electrical Products Manufacturing](#), and [Transportation and Warehousing](#).

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☐ Long, complex, and/or non-transparent supply chains

Overview of the Housekeeping and Facilities Operation Sector:

There are a number of different services included in the Housekeeping and Facilities Operation sector, including janitorial services, laundry services, grounds maintenance, guarding/security services, and waste management services. These services are not typically provided by the same people, but they share characteristics as an industry, in that the jobs are all relatively low-skilled and labor-intensive, and are associated with the basic operation and maintenance of facilities. Virtually all facilities require janitorial, landscaping, security, and waste management services, while laundry service is more intensively associated with residential facilities such as VA hospitals, military bases, and federal prisons. Staffing in the sector ranges from the informal employment of individual maids or gardeners to the formal sourcing of whole workforces from employment agencies that specialize in providing particular facilities-related services to clients. Commodity inputs to the sector are relatively minimal, consisting mainly of cleaning supplies, equipment, and vehicles, with associated links to the Extractives/Mining and Metal Production, Electronics Manufacturing, and Transportation and Warehousing sectors for the purposes of risk analysis for human trafficking. As a service-based industry, however, housekeeping delivery is by nature localized, and by far the most significant risk of human trafficking in the Housekeeping/Facilities Operation Sector derives from the supply of labor.

Economy:

Although housekeeping services are grouped together under an umbrella category within the PSC code system used to track federal contracts, the various component industries of this sector are not generally considered to comprise a unique sector of the global economy, more commonly being treated as subsets of a more general “service” sector. Aggregate global economic data are therefore somewhat difficult to assemble, but the industry-specific US market data give a sense of the relative scale and nature of the various housekeeping service industries:

There are currently approximately 800,000 janitorial businesses in the United States, with annual revenue of \$52 billion.⁵³³ The cleaning industry has low barriers to entry and is quite competitive, although it is somewhat consolidated at the top end, with the fifty largest companies accounting for about thirty percent of the revenue, according to one industry analysis.⁵³⁴ Smaller companies and self-employed cleaners tend to service residential properties, while larger companies generally provide cleaning services to businesses and institutions.

A 2014 market analysis of the industrial laundry and linen supply industry shows about 3,000 industrial laundry enterprises in the United States, with annual revenues of about \$11 billion.⁵³⁵ The industry is moderately capital-intensive, requiring industrial laundering and transport equipment, but the workforce is low-skilled.

The landscaping or grounds maintenance industry currently has nearly 400,000 businesses in the United States, generating revenues of \$73 billion.⁵³⁶ The landscaping industry has extremely low barriers to entry, and little regulatory oversight. It is an important employer of unskilled and immigrant labor.

The security industry encompasses a range of security-related services, including specialized and technical fields like information technology security, design and installation of security equipment, and private detective investigation work, in addition to guarding services. Of these, only guarding services are low-skilled and labor intensive, and therefore of concern for potential human trafficking risk. Excluding IT security and the security equipment industry, the United States security services industry currently consists of about 11,000 businesses, generating annual revenue of approximately \$27 billion.⁵³⁷

The United States garbage collection industry generated \$47 billion in revenue in 2014, with approximately 8,500 businesses.⁵³⁸

One area in this sector in which global data are available is that of household domestic laborers, who provide janitorial, laundry, and sometimes cooking services inside the homes of their employers. A 2013 ILO study of the global domestic worker industry found domestic work to be a major global employer, accounting for 1.7 percent of total employment worldwide, and rates as high as 11.9 percent of all paid jobs in Latin America and the Caribbean, and eight percent in the Middle East.⁵³⁹ A recent analysis by Human Rights Watch reports that there are an estimated 53 million domestic workers worldwide.⁵⁴⁰

Hotel housekeepers make up a very significant proportion of the labor force of the multi-trillion-dollar global hospitality industry as well.

Workforce:

The majority of jobs in this sector are low-skilled and low-paid. The duties of janitors and building cleaners include gathering and emptying trash, cleaning building floors, cleaning and stocking restrooms, cleaning spills, washing windows and walls, and making minor repairs in buildings.⁵⁴¹ Laundry and dry-cleaning workers inspect articles for stains, sort articles, load clothing into machines, add detergent and bleach to machines, sort and hang clothing, and clean and maintain laundry machines.⁵⁴² Ground maintenance workers mow, edge, and fertilize lawns. They weed and mulch landscapes, trim hedges, shrubs, and small trees, remove dead, damaged, or unwanted trees, plant flowers, trees, and shrubs, and water lawns, landscapes, and gardens.⁵⁴³ The duties of security guards and surveillance officers include protecting and enforcing laws on an employer's property, monitoring alarms and closed-circuit TV cameras, controlling access for employees and visitors, conducting security checks over a specified area, writing reports on what they observed while on patrol, interviewing witnesses for court testimony, and detaining violators.⁵⁴⁴ Refuse and recyclable material collectors collect and dump refuse or recyclable materials. Some collectors may be operating the vehicles, while others are strictly tasked with collection and disposal.⁵⁴⁵

In 2012, 2.3 million janitors and building cleaners, 1.2 million grounds maintenance workers, and just over 1 million security guards and surveillance officers were employed in the United States.⁵⁴⁶ In May 2013, the United States employment estimate for refuse and recyclable material collectors was approximately 120,000 workers.⁵⁴⁷

A major subset of housekeeping sector laborers globally are household domestic workers. The demand for domestic workers has grown significantly over the past two decades. A recent ILO study found that there were over 52.5 million domestic workers worldwide in 2010. The largest numbers were employed in Latin America and the Caribbean (19.5 million) and Asia and the Pacific (21.4 million), although rates of employment of servants were also high in the less densely populated Middle East.⁵⁴⁸ The large majority of domestic workers are women: on average fully 83 percent according to the ILO study, and the employment arrangements tend to be informal, with varied employment titles and arrangements.⁵⁴⁹ Many domestic workers are international migrants seeking employment opportunities in wealthier countries, moving both within regions such as Latin America and Southeast Asia, and from such regions to more prosperous countries in North America and Europe. In countries such as the United States, where rates of employment of domestic servants are fairly low, the industry is disproportionately dominated by foreign migrants, although no precise global data on percentages of migrants within the industry are available.⁵⁵⁰

Risks to Human Trafficking in this Sector:

The United States Department of State 2014 Trafficking in Persons report noted evidence of human trafficking in the housekeeping and facilities operation sector in the following countries: Australia, Belgium, Curacao, Denmark, Egypt, Finland, Italy, Morocco, Netherlands, and the United States.⁵⁵¹

Hazardous/Undesirable Work:

Many positions within the housekeeping service industries are classic examples of “3D” jobs – dirty, dangerous, and difficult. In laundry, employees work long hours, usually standing up, in hot and noisy environments, and the work may involve the use of harsh chemicals.⁵⁵² Janitorial jobs require long hours of walking, standing, or bending and sometimes involve moving and lifting heavy supplies and equipment.⁵⁵³ Cleaners have high levels of musculoskeletal problems compared to other professions and they also are known to suffer from hand dermatitis caused by wearing gloves for long periods of time and working with harsh chemicals.⁵⁵⁴ Janitors may have to work night shifts as well, depending on the nature of the facility being cleaned,⁵⁵⁵ and are often not given enough time to complete their tasks, which adds an additional element of danger and stress.⁵⁵⁶ Landscaping and grounds maintenance work is very physically demanding and requires the use of dangerous equipment and the application of harsh chemicals, contributing to worker vulnerability to injury. Groundskeeping work is also highly seasonal.⁵⁵⁷ Seasonal work is often associated with income instability for workers. Security guards work long hours standing or sitting, and by its nature their work has the potential to be very dangerous.⁵⁵⁸ Waste management employees lift heavy loads and work with unpleasant material. Many domestic workers are expected to work long hours and to be on call 24 hours per day. Female domestic workers are vulnerable to sexual harassment and assault.

Jobs of these kinds typically require few skills and little language competence, making them accessible to workers who may have few other options for formal employment, and may ultimately serve as a pathway to more desirable modes of employment for low-skilled women, international migrants, youth, and others at the margins of the formal workforce.⁵⁵⁹ Because of their marginality, however, such workers are often in a poor position to advocate for improved working conditions or employment terms for themselves, and are vulnerable to exploitation and abuse, including human trafficking. In one particularly egregious case in 2008, for example, six women from China were allegedly held as “slaves” by a laundry company owned by Techoclean in Japan. The women reported working more than 15 hours a day for as little as 22 yuan an hour (\$3.25), less than half of Japan’s legal minimum rate. The working conditions were extremely poor and the women got fungal skin infections from wearing rubber gloves and shoes for such long periods of time, as well as chemical burns from handling detergent. The women protested their conditions but were met with beatings and deportation.⁵⁶⁰

Even when not in a situation of outright trafficking, outsourcing, cutbacks in staff, and other money saving techniques can lead to lower safety standards for workers in housekeeping industries. A recent

protest by cleaners at the Frankfurt University Hospital in early 2014 was a relatively unusual occurrence, but their demands – for higher standards in training, equipment, and protection – reflect the concerns of workers in these sorts of industries.⁵⁶¹

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

Most of the tasks performed by janitors, housekeepers, laundry workers, groundskeepers, and security guards are considered low-skilled, and the jobs are generally poorly paid. Workers who take on such jobs generally do so because they lack better employment alternatives, typically due to a combination of poverty and lack of skills. Because such jobs typically require little investment in workforce training on the part of employers, and because poor and low-skilled workers are often abundant in the populations supplying the labor for these industries, such workers are easily replaced and therefore poorly positioned to advocate for themselves in the face of exploitation or trafficking. Many workers in these industries are women, children, migrants, members of ethnic minorities, or members of other relatively disenfranchised groups. Such people often lack robust social and economic resources, and may be dependent on their employers or employment agents not only their job security, but also their immigration status, housing, food, or other necessities.

Perhaps the most vulnerable workers in the housekeeping sector are domestic workers, who are often vulnerable to exploitation or trafficking at the hands of their employers, due both to the isolated, closed-off environments in which many of them work, and to the lack of adequate legal protections for domestic employees in many countries. According to the ILO, “more than half of all domestic workers have no statutory limitation of their weekly working hours, more than two out of five are not entitled to be paid a minimum wage, and more than a third have no right to take maternity leave.”⁵⁶² A recent Human Rights Watch article reports that the vast majority of domestic workers are women and girls, many of whom are migrants.⁵⁶³ Such workers “often work 14 to 18 hours a day, seven days a week, for wages far below the minimum wage. They may be locked within their workplace and subjected to physical or sexual violence. Children and migrant domestic workers are often the most vulnerable.”⁵⁶⁴ Reports of domestic worker abuse from all over the world suggest a widespread problem.⁵⁶⁵

Child trafficking in domestic labor is also common in many parts of the world. A 2012 ILO estimate defines “child domestic work” as a “situation where children aged 5 to 17 years perform domestic tasks in the home of a third party or employer (with or without remuneration),” and found that 17.2 million children were engaged in such labor.⁵⁶⁶ A Human Rights Watch study of the problem in West Africa, for example, found a network of child trafficking routes centered on Togo including one route focused on trafficking Togolese girls into domestic and market labor in Gabon, Benin, Nigeria, and Niger.⁵⁶⁷ It is also a common practice throughout Africa for orphaned children to be sent to live in the homes of their extended relatives, where they work as domestic laborers for free, sometimes without adequate food or the opportunity to attend school.⁵⁶⁸ In Haiti, there have been a large number of reports of the trafficking and exploitation of *restaviks*, children from impoverished families sent to live with and work for more prosperous families.

Workers who lack legal immigration status may be particularly vulnerable to exploitation by employers or outsourcing agents (see below), who may use the threat of arrest or deportation to enforce their labor. In a recent lawsuit against Wal-Mart in New Jersey brought by a group of undocumented migrants working as janitors, the plaintiffs claimed that Wal-Mart and the janitorial contractors on which the company relied exploited them by “forcing them to work in excess of the statutory maximum; denying them lawful pay and benefits under FLSA; denying them sick leave, meals or breaks; hiding them from law enforcement by threatening them with deportation or locking them in the stores during their shifts; in some cases physically beating them.” The case is awaiting trial.⁵⁶⁹

Disabled or socially stigmatized workers may also be at heightened risk of trafficking or other forms of labor abuse. The Magdalene Laundries, run by four religious orders in Ireland in the 19th and 20th centuries, were notoriously used as workhouses for women and girls who were considered deviant (single mothers, victims of sexual abuse, and women with mental disabilities). The last of the laundries operated until 1996 and the Irish Parliament just recently announced, following the publication of a report on the subject, that there was “significant state involvement” in the operation. Estimates state that 10,012 young women worked in the laundries, a quarter of whom were sent by the state as an alternative to prison. When the women escaped, they were returned by police. The women were kept “in a system of slave labor,” working six days a week without pay, according to one story.⁵⁷⁰

While such historical situations may seem unlikely to pose a contemporary human trafficking risk to US supply chains, the United States does actually source significant labor in the housekeeping and facilities operation sector from workshops for the disabled such as the Goodwill Industries and National Industries for the Blind (NIB), particularly in the laundry and janitorial industries. Due to a 1930s-era law still on the books permitting payment of sub-minimum wage rates to disabled people in federal workshops, nearly 400,000 disabled United States workers in Goodwill and NIB workshops currently earn subminimum wages, despite the fact that many affiliates have successfully transitioned to a minimum/fair wage model.⁵⁷¹ The presence of low wages does not necessarily mean the presence of trafficking, but the unequal structural arrangement governing such workplaces may pose risks of greater vulnerability to exploitation for disabled workers. Indeed, reports of wage theft, sexual harassment, and other abuses in workshops for the disabled have been alleged for years.⁵⁷²

Migrant Workforce:

Migrant workers are more vulnerable to human trafficking for a number of reasons, including deceptive recruitment, lack of local support systems, lack of familiarity with the local culture or language, dependence on the job and employer due to migration-related debt, vulnerability to deportation due to immigration status, and constraints imposed by employers on their freedom to leave the workplace. Migrants may also feel pressured to remain in coercive or abusive situations due to the dependence of their family members back home on their remittances.⁵⁷³

In the United States, a large proportion of the workers in housekeeping industries are temporary migrants or immigrants. According to the Pew Research Center, just under 2.5 million (almost one-third) of the construction, landscaping, cleaning, and maintenance workers employed in the United States in 2012 were foreign born. Nearly half of the foreign-born workers were from Mexico. Migrants are less common in the security services industry: only 289,000 (just over five percent) of the nearly 4.1 million workers in the Pew study were foreign born, mostly from Mexico, South and East Asia, and the Caribbean.⁵⁷⁴

Housekeeping and other facilities operation services for large international projects such as military or post-disaster recovery operations and major sporting events are often provided by migrant laborers who are hired by third-party labor recruiters or outsourcing agencies. Low-skilled positions in construction and transportation, as well as housekeeping positions for janitors, landscapers and groundskeepers, launderers, foodservice providers, and security personnel all need to be staffed quickly in such contexts. If sufficient numbers of appropriate workers are unavailable locally, migrants are imported for such jobs, raising the risk of human trafficking. See the [Federal Procurement of Large Logistics Management Contracts](#) pullout box below for a discussion of the risk of human trafficking associated with large logistics management contracts issued by the United States military.

Trafficking of migrants has been documented in a number of housekeeping-related industries, even in countries not normally noted for having labor rights problems. In the Netherlands, for example, migrant men and boys from Romania, Nigeria, Poland, Pakistan, Sierra Leone, Angola, China, Ghana, Guinea, India, Bulgaria, Egypt, Hungary, and the Philippines are known to have been trafficked into janitorial

service work, among other sectors. Migrant domestic workers in the Netherlands are very vulnerable as well, and some of these workers are employed by foreign diplomats posted in the Netherlands.⁵⁷⁵ An additional report of migrant trafficking for cleaning services occurred in Denmark recently. In that case, two Romanian migrant workers were forced to work as janitors for three years. They were not paid for their work and lived in horrible conditions “in a closet on the alleged traffickers’ balcony.”⁵⁷⁶

Security companies have also been implicated in human trafficking. In Uganda, licensed security companies and employment agencies in Kampala recruit Ugandans to work as security guards in the Middle East. Some of these workers have reported passport retention, nonpayment of wages, and lack of food.⁵⁷⁷ In Iraq, migrants from Bangladesh, India, Indonesia, Nepal, the Philippines, Sri Lanka, Thailand, Pakistan, Georgia, Jordan, Ethiopia, and Uganda are known to have been forced to work as security guards, among other occupations.⁵⁷⁸

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in Labor Supply Chain:

Labor brokers, outsourcing agents, and other middlemen play a significant role in the supply of labor to the housekeeping and facilities operation professions, both internationally and within the US Industries such as janitorial services, hotel cleaning, landscaping, and laundry services register high levels of migrant labor, and are increasingly reliant even within the United States on outsourcing for staffing. For migrants especially, the presence of middlemen opens workers to the possibilities of deception in recruitment regarding the types and terms of employment and recruitment and job placement fees. These workers frequently have to borrow money to obtain their jobs and earn less than expected, increasing their risk of debt bondage. Migrants are also vulnerable to having their passports retained by their agents or employers, severely restricting their ability to remove themselves from exploitative or abusive situations.

In a recent case brought against a landscaping company in Tennessee with the help of the Alliance of Guestworkers for Dignity serves as an example of the worst types of abuses that can occur. In this case, a migrant worker hired through the H-2B visa program reported that the company confiscated his passport and visa as soon as he arrived in the United States. He said that the working conditions were akin to slavery and that employees were sometimes forced to work at gunpoint. Following a US Department of Labor investigation, the company, Vanderbilt Landscaping, was made to pay \$18,496 worth of back wages to 42 workers for failing to pay workers minimum wage and overtime.⁵⁷⁹ In addition, the Department assessed \$18,000 in Civil Monetary Penalties for violations of H-2B provisions. In total, the employer paid \$36,496. Fifteen workers subsequently filed a federal lawsuit accusing the company of human trafficking, forced labor, and civil rights violations.⁵⁸⁰ In addition to passport and visa confiscation, the group of workers claimed that managers kept them under constant surveillance and issued threats. One worker was sent back to Mexico after he complained about the working conditions. Another described being trapped by debt, as he had to borrow money to come to the US, and had not made enough money to pay back the loan. The work itself was described as exploitative – the workers were tasked with mowing the medians and picking up trash on Tennessee highways and interstates – and the housing conditions were inhumane. The Tennessee Occupational Health and Safety Administration fined the company \$4,700 for equipment safety and crowded and unsafe housing conditions (see the [Guestworker Visas](#) pullout box for more information on visa programs).⁵⁸¹

In a similar case in Ohio, *United States v. Maria Terechina*, the defendant was accused of recruiting women from Eastern Europe to work in hotel and laundry operations in Columbus, Ohio. The workers were held in debt bondage and “involuntary servitude” with their salaries and passports withheld. In that case, Terechina pled guilty to “conspiring to defraud the government and conduct human trafficking,” and was sentenced to one year in prison.⁵⁸²

Workers in the housekeeping sector overseas are also vulnerable to exploitation and trafficking by employment intermediaries. The union United Voice recently uncovered the abuse of international

student workers in the office cleaning industry in Melbourne, Australia. In that case, the international students interviewed by the union representatives were mostly unaware of their rights and were chronically underpaid. Despite a formal labor agreement ensuring that cleaners in the biggest office buildings were to be paid \$24.35 an hour for overnight work, the United Voice investigation discovered that most cleaners were in fact paid \$15 to \$20 instead, with the building owners or the subcontracted cleaning companies pocketing the remaining money, a form of wage theft made possible by outsourcing.⁵⁸³

Perhaps most relevant for purposes of EO compliance, there have also been reports of trafficking and other labor abuses of migrants recruited to work for United States military and humanitarian operations through large logistics management contractors.⁵⁸⁴

Federal Procurement of Housekeeping Services:¹¹

Housekeeping services like landscaping, janitorial and laundry services, guard/security services, and waste management/garbage collection are purchased by virtually all federal agencies. The largest and most numerous contracts are centered geographically in areas with significant clusters of federal buildings, including the National Laboratories, Centers for Disease Control, and NASA facilities, and in Washington, DC. Overseas, contracts are clustered around both temporary US facilities such as military camps and compounds associated with relief operations, and permanent facilities such as embassies, military bases, and hospitals.

Total combined net action obligations for FY2013 on janitorial (PSC S201) , landscaping (PSC S208), laundry (PSC S209), guarding (PSC S206), and waste management/garbage collection (PSC S205) services amounted to \$5.856 billion. Housekeeping services are also frequently bundled into large logistics and facilities management contracts (see the [Federal Procurement of Large Logistics Management Contracts](#) pullout box for more information).

Of the \$5.856 billion spent on direct housekeeping contracts in FY2013, \$1.228 billion was spent overseas, with 217 contracts (amounting to \$1.123 billion) greater than \$500,000, qualifying for compliance scrutiny under the Executive Order.

Overall, the US spent \$1.330 billion on janitorial services (PSC S201), \$421 million on landscaping (PSC S208), \$323 million on garbage collection/waste management (PSC S205), and \$144 million on laundry (PSC S209) in FY2013. Guarding services coded under housekeeping (PSC S206) (i.e., not prison or detention center guards) were the largest expenditure category in this sector, amounting to \$3.638 billion in FY2013. The largest guarding contracts were overseas, mainly in Afghanistan, Iraq, Germany, Israel, and South Korea, but there were several large (>\$20 million) contracts in the United States as well.

Federal Procurement of Large Logistics Management Contracts

In recent decades, the Department of Defense and other federal agencies have increasingly turned to civilian contractors for assistance managing large logistical operations associated with military, humanitarian, and training missions at home and abroad.

The largest and most well-known of these contracts are those associated with the Army's Logistics Civil Augmentation (LOGCAP) Program, operating primarily in Afghanistan, Iraq, and Kuwait, although

¹¹ All federal procurement data is drawn from the [Federal Procurement Data System](#). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

in FY2013, there were also large contracts of this kind in Oman, Bahrain, and Central African Republic. The LOGCAP program is currently in its fourth iteration (LOGCAP IV), created after LOGCAP III was halted due to controversy over misappropriation of funds by its sole contractor, Halliburton-KBR. Under LOGCAP IV, three firms, Fluor, DynCorp, and KBR compete for contracts, which are indefinite-quantity/ indefinite-delivery contracts with up to nine year durations.⁵⁸⁵ In FY2013, the Army spent a total of \$4.248 billion on contracts for facilities support services (NAICS 561210) and logistics support (PSC R706) from these three companies. \$3.787 billion of this was spent in just three contracts to Fluor and Dyncorp for logistical services in Afghanistan. Total US spending on such contracts (all agencies, all vendors, all locations) was \$5.367 billion in FY2013.

LOGCAP contracts provide the Army with a remarkably extensive range of services. According to a feature on the subject on the Army's official website, "highlights of a LOGCAP Fluor day at Bagram include: 3,800 bags of laundry washed, dried and folded; more than 24,000 meals; a supply support activity...that manages more than 11,000 line items going to more than 400 customers; and a solid waste facility that processes nearly 200 cubic meters of recyclable items out of a total of almost 3,000 cubic meters of waste processed each day. They also operate fuel points, wash racks, MWR facilities, and other services that literally touch each military, civilian and contractor at Bagram every day."⁵⁸⁶

Providing the staffing necessary to field such massive and complex operations is a significant component of the overall product being sold by companies like Fluor, Dyncorp, and KBR. While these firms typically hire some labor locally, workers are also imported from all over the world. Dyncorp, for example, claims that, "by leveraging worldwide expertise in contingency operations and an extensive global network, high-performing teams have quickly organized and deployed a workforce of more than 20,000 people to more than 70 sites throughout the Middle East on five task orders."⁵⁸⁷

Given the range of services such contracts deliver, many of which are in the [Housekeeping/Facilities Operation](#), [Construction](#), and [Transportation and Warehousing](#) sectors, much of the workforce involved is relatively low-skilled. Migrants in these positions, in particular, are at significant risk for human trafficking, and trafficking abuses of migrant workers on LOGCAP contracts have been reported in the media.

A particularly damning exposé was published by *Al Jazeera* in March of 2014, which drew upon five months of investigation of US military bases in Afghanistan, and described widespread collusion between DOD subcontractors and recruiters to profit from exorbitant fees charged to migrants for job placements, sometimes leaving the workers in situations of debt bondage for as much as a year.⁵⁸⁸ The report found that, although prime contractors such as Dyncorp or KBR officially profess to having zero tolerance for TIP, they do not meaningfully scrutinize the behavior of their subcontractors, on whom they rely for the bulk of their recruiting. The report described a system in which recruitment agents in the migrant-sending countries pay bribes to DOD subcontractors to hire from their pools, with the costs of these bribes passed on to the workers. Such kickbacks are a disincentive for subcontractors to hire workers directly, instead encouraging the recruiter middlemen.⁵⁸⁹ Contractors reportedly pay workers extremely low wages – as little as \$150 per month – while receiving upwards of 10 times worker wages in compensation from the Department of Defense.⁵⁹⁰ The report also found widespread examples of excessive recruitment fees, and of deceptive recruitment, including situations in which workers had been sent to different countries, earned lower wages, or ended up doing different work than they had been promised when making the decision to migrate.⁵⁹¹

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Textile and Apparel Manufacturing

This report covers labor on sites where textiles and apparel are manufactured. For information on the human trafficking risks associated with the production of the materials used in the manufacturing of textiles and apparel, see the following commodity reports: [Cotton](#), [Leather](#), [Silk](#), and [Wool](#).

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☒ Long, complex, and/or non-transparent supply chains

Overview of the Textile and Apparel Manufacturing Sector:

Industries in the textile manufacturing sector convert basic fiber into usable items. Textile mills use natural or synthetic material such as cotton or polyester to produce items such as fiber, yarn, or thread. Yarn is produced through spinning short fibers together. Fabric is produced by weaving or knitting yarn using hand looms or automated machines. Fabric may undergo finishing processes to improve the look and feel. Dyeing gives color to fabric and can be done at any stage of textile manufacturing. Garment or apparel making involves multiple steps including cutting, sewing, pressing and finishing. Value addition includes embroidering, printing, and other embellishment.

Economy:

Apparel and textiles are two of the largest industries in the world, with the global apparel retail industry valued at \$1.175 trillion in 2011.⁵⁹² Most nations in the world participate to some degree in the textile and apparel sector. The World Bank notes that apparel production is often a “springboard for national development.”⁵⁹³ The sector has relatively low barriers to entry as it is not highly capital intensive and primarily utilizes low-skilled workers.⁵⁹⁴ Further, production can easily be shifted from country to country in pursuit of lower production costs.⁵⁹⁵ Thus, the same factors that create low barriers to entry also mean that the sector is highly competitive, and create downward pressure on wages and working conditions.

Emerging economies in which apparel and textiles play a large role include Cambodia, Bangladesh, Pakistan and Sri Lanka. In Bangladesh and Cambodia, over 80 percent of manufacturing exports derive from the apparel and textile sectors.⁵⁹⁶ Bangladesh is home to the world’s fastest growing apparel sector.⁵⁹⁷ China is the world’s largest exporter of apparel and textiles, producing over 40 percent of global exports in 2012, followed by the European Union (25.2), India (4.1), Turkey (3.6), and Bangladesh (3). The US is the largest apparel market in the world, with a value of about 331 billion annually, around 28 percent of the global market. Ninety-seven percent of garments sold in the US are made internationally.⁵⁹⁸ The exporters to the US market are China, Vietnam, Indonesia, Bangladesh, and Mexico.⁵⁹⁹

Domestic textile production is located primarily in Southeastern states and California while the majority of the apparel industry is located in California, New York, and North Carolina.⁶⁰⁰

Workforce:

The textile and apparel industries are two of the world’s most globalized sectors, providing employment for over 60 million workers worldwide.⁶⁰¹ For many workers, employment in the textile and apparel sector offers a first opportunity to gain employment in the formal economy, which is typically higher paid and more stable than the informal sector or agriculture. However, due to the highly competitive nature of

these industries, wages and working conditions are often sub-standard or exploitive.⁶⁰² Both the textile and apparel industries are characterized by low levels of unionization and at least some reliance on migrant labor. Brands attempting to cut transport costs and shorten lead times move their production bases closer to retail markets, using migrant labor to keep costs low. This trend leads to an increase in temporary, contract, and seasonal labor within the workforce. Hundreds of thousands of migrant workers are employed within the garment and textile supply chains across Europe, Asia, North and South America, and Africa. Migrants are particularly prevalent in the textile and apparel industries of Taiwan, Malaysia, Thailand, Mauritius, Jordan Egypt and Maldives. Approximately 85 percent of these workers are female low-skilled or unskilled workers.⁶⁰³

Risks to Human Trafficking in this Sector:

The US Department of State 2014 Trafficking in Persons report noted evidence of human trafficking in the textile and apparel manufacturing sector in the following countries: Brazil, India, Italy, Kyrgyz Republic, Malaysia, Nepal, Russia, Turkmenistan, and Zambia.⁶⁰⁴

Hazardous/Undesirable Work:

Workers in the textile and apparel manufacturing sector face a wide variety of potential labor violations including withholding and deduction of wages, forced overtime, and verbal, physical, and sexual harassment.

Health and safety risks facing workers include chemical exposure, dust, poor ventilation, musculoskeletal stress, and noise exposure.⁶⁰⁵ Apparel and textile production, particularly sewing machine operation and hand sewing, often require workers to complete “monotonous, highly repetitive and high-speed tasks,” as well as to remain in one posture for long period of time. Workers who are paid at a piece rate may be incentivized to work far beyond what is safe in order to earn a basic wage. Musculoskeletal disorders can lead to long-term disability. Chemical hazards include formaldehyde exposure, which is associated with cancer development both, during production and in warehouse areas. Organic solvents used in finishing can lead to neurological, central nervous system, and liver illnesses.⁶⁰⁶ Sandblasting, a process used to fade denim, has been found to cause the serious lung disease, silicosis.⁶⁰⁷ Child workers are at particular risk of exposure to toxins and musculoskeletal injury.

Further, many apparel factories are housed in poorly maintained or constructed buildings, leaving them vulnerable to collapse. These risks are compounded when facilities are not adequately inspected, due to corruption or lack of capacity. In Bangladesh, the Rana Plaza facility collapse – which killed 1,129 workers – has been largely attributed to corruption and negligence on the part of the government and factory owners.⁶⁰⁸ Fire is also a serious concern, particularly in Bangladesh where 800 workers were injured in fires in 2013.⁶⁰⁹ Apparel and textile facilities are especially vulnerable to fires due to the use of highly flammable material. In some cases, management locks exits or otherwise prevents workers from leaving.

Wages in the textile and garment sector are low, and workers face irregularities in wages and payments. According to the Clean Clothes Campaign, garment workers globally rarely earn more than \$2 per day.⁶¹⁰ Workers also lose expected wages when a factory suddenly reduces workforce or closes due to reduced client orders – a frequent occurrence in the apparel sector due to the volatility of buyer demands.⁶¹¹

The necessity of meeting tight buyer deadlines also drives high rates of forced overtime in the apparel sector. Forced overtime is common, and workers who protest may be fired and blacklisted from the industry. Workers may work up to 18 hour days, seven days a week in advance of a deadline. In some cases, workers may rely on overtime pay to earn a living wage. Many factories, however, do not adequately compensate workers for overtime, and often underpay wages by taking advantage of unrealistic quota systems or by falsifying overtime records.⁶¹²

Wage and hour violations are “endemic” in the US garment sector, according to a labor expert interviewed by Verité. A 2008 National Employment Law Project (NELP) survey of 4,387 low-wage workers in Chicago, Los Angeles, and New York City found that apparel and textile factories posted the highest rate of minimum wage violations of surveyed industries employing low-wage workers, at a rate of 42.6 percent.⁶¹³ NELP reported that 23.6 percent of workers in New York City’s apparel and textile factories registered minimum wage violations. Sixty percent of workers surveyed reported being paid by the hour, while 40 percent were paid by the piece, with piece rate workers reporting more than double the rate of minimum wage violations as workers who were paid by the hour.⁶¹⁴ Reports by the Polaris Project indicate that employees in the garment industry work up to twelve hours per day, six to seven days per week, with few or no breaks.⁶¹⁵ The 2008 NELP survey indicates that 71 percent of apparel and textile factory workers reported overtime violations.⁶¹⁶ NELP further found that the apparel and textile sector registered the highest rate of meal break violations out of any industry covered by the survey in New York City, at 88.4 percent.⁶¹⁷

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

The workforce in the textile and apparel sector is highly vulnerable, drawn primarily of workers from marginalized rural areas and urban areas, primarily children, adolescents and women, along with a smaller number of men.⁶¹⁸ The ILO notes that “in some countries, garment manufacturing may be one of the only opportunities to move into the formal sector.” Further there are low levels of trade-union representation, allowing few opportunities for worker grievances.

Child labor helps fill the demand for cheap and unskilled labor needed in multiple levels of the supply chain. Child labor is present in both textile and apparel production. In general, child labor is less common in first-tier formal garment production facilities due to pressure from international buyers and consumers. However, child labor is found in textile production, small sub-contracting units, home production units and in value-added processes such as beading. Children also produce fibers in spinning mills and the hand loom industry. In some cases, children are reportedly valued for their “nimble fingers,” and participate in tasks including “dyeing, sewing buttons, cutting and trimming threads, folding, moving and packing garments...embroidering, sequinning and smocking.”⁶¹⁹ Children may seek work in the textile and garment sector as a means to earn income for themselves and their families, or their parents may be offered an advance fee, entering the children into debt bondage.⁶²⁰ In many cases, children are driven into the sector because adult wages are so low that children must supplement the wages of their parents, who work in the sector themselves.⁶²¹ Children who are considered to be “apprentices” or learning skills may be drastically underpaid, or not paid at all, and many face long hours that interfere with schooling.⁶²² Health and safety concerns endemic in the textile and apparel production sectors are magnified for children. Under the Sumangali scheme, girls in India are recruited to work in textile factories for two to three year periods. Salaries are withheld during work periods, and are only paid to parents when girls return home and the money is used to pay dowries. Charges for food and housing are deducted from girls’ salaries. Girls are housed at the worksite and their freedom of movement is severely curtailed. They are not allowed to leave the factory grounds except at prescribed times, during which they are accompanied by a security guard. Vulnerability to sexual abuse is high.⁶²³

In addition to sub-contracted facilities, much work in the textile and apparel sector is sub-contracted out by “homeworkers” who work in their homes and paid on a piece-rate basis.⁶²⁴ These workers – predominantly women – are generally low-skilled, and are considered “independent contractors.” Further, because they work in the home, their labor is invisible in the regulatory context, so they lack both social protections as well as a formal relationship with an employer.⁶²⁵

Women and girls are the majority of the labor pool in textile and apparel sectors, representing about 85 percent of workers by some estimates. Textile and apparel work is often seen as “appropriate” for female

involvement, and many may have migrated from rural areas seeking employment.⁶²⁶ Further, tasks within the sector are highly segregated, with women relegated to the low skilled, low-wage jobs, whereas men tend to be employed in less-precarious management jobs.⁶²⁷ Women also face high levels of sexual harassment and abuse.⁶²⁸

In the US prison labor is used to produce garments, including federal contracts for military uniforms.⁶²⁹ Prisoners making apparel for the federal government were reportedly paid 23 cents to \$1.15 an hour. (See the [Prison Labor in Federal Supply Chains](#) pullout box for more information.)⁶³⁰

Migrant Workforce:

In many countries, the textile and apparel production sectors are highly dependent on migrants, both internal and international.

The United States garment industry's workforce has historically been comprised of recent immigrants. The Partnership for the New American Economy points to immigration as a key reason that manufacturing companies are still able to produce in the US.⁶³¹ In a recent report, the Partnership argued that about 15 percent of domestic manufacturing employment (1.8 million positions) has remained in the US as a result of immigrant workforce participation.⁶³² According to a 2005 Pew Research Center report, 26 percent of apparel workers and 18 percent of sewing machines operators were believed to be undocumented.⁶³³ Immigrant labor makes up about 64 percent of garment and other factory workers in New York City, according to 2013 reports.⁶³⁴ In the US, migrant workers employed in the garment sector are subjected to rampant wage and hour violations and are vulnerable to becoming victims of human trafficking due to smuggling and placement debt, their lack of legal status, and their fear of filing grievances.

The apparel sectors in Taiwan, Malaysia, Thailand, Mauritius, Jordan, Egypt, US, Australia the European Union and the Maldives have been identified as using a high percentage of international migrant workers. Many migrant workers enter the garment sectors with recruitment fee debt to labor brokers.⁶³⁵ Abuses in the apparel sector are exacerbated in the case of migrants. Migrant workers are often paid a lower wage than their local counterparts, calling what the Ethical Trading Initiative describes as a "two-tier" workforce. Already low wages are reduced even further for deductions – including levy payments, and mandatory medical, food, and dormitory fees. In Jordan, for example, where migrants work in the country's Qualifying Industrial Zones (QIZ), migrants receive lower wages than Jordanians; in 2012, the national minimum wage was JOD 190 for Jordanian workers and JOD 110 for migrants.⁶³⁶

Other indicators of human trafficking, including document retention and mandatory "runaway" insurance (the practice of requiring workers to lodge deposits) are common.⁶³⁷

In the United States, textile and apparel sector production relies on migrant workers, both documented and undocumented.⁶³⁸ Many of the migrant workers are from East Asian and Latin American countries.⁶³⁹ Just as the globalized nature of the textile and apparel sector puts downward pressure on working conditions globally, conditions for workers – particularly migrant workers – in the US are sub-standard. Recent investigations by the United States Department of Labor have found repeated wage, overtime, and record-keeping violations.⁶⁴⁰ Migrant workers in the United States are often employed through brokers who provide their labor to garment factories.⁶⁴¹ Although the Immigration Reform and Control Act of 1986 (IRCA) prohibits hiring of undocumented migrants, employers and brokers continue to do so, and use the threat of deportation to prevent undocumented workers from filing grievances.⁶⁴²

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in Labor Supply Chains:

Labor outsourcing, both of migrant and domestic workers, is very common in the apparel sector and intermediaries play a wide variety of roles. Garment factories increasingly tend to subcontract hiring, usually through third-party labor brokers or private employment agencies. Demand for labor contributes to the hiring of undocumented workers through labor brokers.⁶⁴³ Manufacturers look to immigrants to help fill the labor demand, but legal immigrant labor can be difficult to secure, and many employers are forced to turn to undocumented workers who are difficult to recruit directly, leading them to turn to labor brokers.

Verité research on the Indian textile and apparel sector found that brokers act as recruiters, supervisors, and agents. These roles are not exclusive and occur at the national and international level. In some cases, workers or former workers may act as brokers, recruiting new workers from informal connections in their home villages.⁶⁴⁴ In general, workers are contracted with an employment agency, which serves as the primary employer, rather than the factory. This allows factories flexibility in staffing levels depending on demand and deadline.

Some labor brokers recruit workers to fill positions under factory management, but do not oversee workers on site. In India, this type of broker includes recruiters for “Sumangali” schemes, under which girls are held under conditions conducive to human trafficking for two to three years. These recruiters are often informal and have ties to the local community.

A second type of labor contractor is engaged by a company to find labor to perform a particular job within a factory. All management responsibilities of the workforce performing this specific task lie with the contractor, although legally the principal employer (the factory) holds ultimate final responsibility for labor rights compliance. These brokers either bring workers to join the company, or the employer assigns workers under them as contract workers. The employer does this to decrease their responsibility for these workers, with the contractors responsible for the specific job with a specific number of workers (either recruited by the contractor or by the employer) to complete the job. If the employer were to utilize regular (permanent) workers, the company would have to oversee all aspects of production and be responsible for the product quality, the timeliness of production, human resource management, and paying worker wages and benefits. With the job contractor functioning within the factory itself, the employer is one step removed from direct, day to day management of these workers. Job contractors are linked to the pervasive use of temporary contract labor. Through this arrangement, contractors are responsible for production planning, and assume control over wages, benefits, and general working conditions. The workers’ total salaries are given to these contractors, who then dispense salaries to workers. Contractors receive a pre-determined commission on each worker if the workers are hired by the contractor. Apart from this, as the contractor also manages the workers, they receive a commission (from the employer) of a certain percentage of the workers’ total salaries every month, again fixed by agreement between the contractor and the employer.⁶⁴⁵ Migrant workers may have contracts with a recruiter, outsourcing agent, and factory management, each with different terms and conditions of work. This obscures the employment relationship and employer accountability and opens the door to abuses.⁶⁴⁶

Workers recruited by agents are often indebted due to high recruitment fees. The Clean Clothes Campaign reports that it is increasingly common for workers to be recruited for facilities where a client order falls through. In this case, the worker may be held in the dormitory, provided one meal a day, and not compensated any further.⁶⁴⁷

Recruiters can also play a role in recruiting home workers. These contractors assume work from factories, and then oversee completion of work in home-based units or households. Home work labor suppliers may function as go-betweens or middlemen between households, where the work is being performed, and subcontracting manufacturing units, which place orders for the work with the labor suppliers.⁶⁴⁸

Long, Complex, and/or Non-Transparent Supply Chains:

Apparel and textile supply chains are complex, unpredictable and often include informal relationships. The current global sector has developed in response to globalization, and increasing requirements by multi-national brands for flexibility and quick turnaround times. Major brands have outsourced production, and focus mainly on branding and marketing. Production for large multi-national companies is largely managed by “agents” with large networks of worldwide factories.⁶⁴⁹

The garment industry has long presented a challenge to those seeking to monitor workplace conditions. Garment manufacturing has long relied on diverse organizational methods that keep employers from directly employing the personnel manufacturing those products. For example, “A ‘jobber’ may sell a design to a retailer, and then contract with a manufacturer for delivery of the product. The manufacturer may purchase and cut the product, but then contract the sewing to one or more companies (which may further contract out sub-assembly).”⁶⁵⁰ Each time a piece of the process is subcontracted, the profit margin diminishes and competition between firms intensifies. A large number of small, informal sewing contractors can easily enter the market and compete with each other for a limited number of contracts, resulting in downward pressure on prices. Since labor costs comprise the bulk of input costs, many sewing contractors’ only option to become profitable is to pay sub-minimum wages.⁶⁵¹

The relationship between retailers and manufacturers further encourages labor violations. Retailers negotiate prices and purchase finished garments from the manufacturers, exerting strong pressure on manufacturers to keep costs low and to speed up production times. The manufacturers place that same pressure on the contractors and subcontractors who actually produce the goods, often through the exploitation of immigrant labor.⁶⁵² Verité expert interviews indicate that brands have a significant amount of leverage over small-scale garment factories in unilaterally setting prices and turnaround times due to competition among various factories. In many cases, brands pay factories low prices for each piece of clothing that they produce and demand short turnaround times. This leads to the factories paying their workers low piece-rates and demanding that they work overtime to meet production demands (during which they are paid the same piece rates as opposed to overtime premiums), rather than an hourly wage that complies with minimum wage and overtime laws. In some cases, factories take a loss on an order so as to maintain its business relationship with a brand. This can result in times during which factory owners do not have enough cash flow to pay their workers, or in extreme cases, low profit margins can force them to close down, resulting in job loss, many times without workers being paid the wages owed to them.

An agent’s responsibility to the client is primarily to deliver a finished product on deadline and under budget, with little consideration of outcomes for workers. For example, if an agent receives an order from a client, they might purchase fibers from a Korean factory, dying and weaving services in Taiwan, purchase zippers and buttons from China, and send materials for production to a factory in Thailand.⁶⁵³ At the factory level, production requests are often further sub-contracted.

There are two primary types of sub-contracting. Vertical sub-contracting means that the order passes from the tier one factory to smaller factory or unit. Orders may be vertically sub-contracted several times. Horizontal sub-contracting means that the order is passed to a “sibling” factory of roughly the same size.⁶⁵⁴ Sub-contracting can send orders across international boundaries as first tier facilities sub-contract orders to countries where the cost of labor is even lower.⁶⁵⁵ Many sub-contracting agreements between facilities are relatively informal, making transparency in the supply chain extremely difficult.⁶⁵⁶ In many cases, sub-contracting may be “unauthorized,” that is, shifted without informing the client. “Value-added” processes such as embroidery are also likely to be outsourced.⁶⁵⁷

The high-levels of sub-contracting have led factories to rely on highly flexible labor pools, encouraging facilities to rely on casual, contract labor hired through agents.

Federal Procurement in the Textiles and Apparel Manufacturing Sector:¹²

Textiles and apparel appear in the federal spend primarily in the form of personal armor, uniforms, outerwear, shoes, and other clothing for troops, prisoners, prison and border guards, and officers in agencies such as the National Parks Service, Federal Bureau of Investigation, and Transportation Safety Administration. The United States Government issued contracts worth \$1.9 billion for personal armor and clothing in FY2013 (PSC 84%, excluding PSC 8460 for luggage and 8465 for individual equipment). Of this, \$764 million was spent on personal armor, \$63 million was spent on badges and insignia, and the rest was spent on uniforms, outerwear, and shoes. Reflecting the Buy America Act, almost all clothing and armor purchased by the United States Government are procured from US contractors.

UNICOR/Federal Prison Industries is the top producer of non-armor uniforms.

The United States issued contracts worth \$119 million for direct purchase of textiles (PSC 8305) for use in blankets, canvas, etc. in FY2013. Tents and tarpaulins (PSC 8340) accounted for another \$63 million in federal spending in FY2013.

Prison Labor in Federal Supply Chains

Prison labor in international law: International law addresses the question of prison labor most comprehensively in the UN Forced Labor Convention, 1930 (No. 29), which prohibits the use of labor undertaken involuntarily under threat of a menace of penalty. Convention 29 includes exemptions for certain forms of non-voluntary labor, including some prison labor, in recognition of the use of labor as a mode of punishment and rehabilitation for convicted prisoners in many countries. The Convention limits the exemption for prison labor, however, by specifying that it must be supervised and controlled by a public authority (i.e., not done within a privately owned or managed prison), and that prisoners must labor for a public purpose, not be hired out to private enterprises for profit.⁶⁵⁸ As a recent legal review on the subject explains, “public prison labor, prison-made products or services purchased only by a state or federal government, (and) prison labor involving the maintenance of public prisons” are not classified as forced labor under international law, while products made or services delivered by prisoners in private prison facilities, or in public prisons on behalf of private enterprises, are seen to be potentially tainted with forced labor under Convention 29.⁶⁵⁹ Voluntary labor by prisoners in private prisons or for private enterprises is permitted, but, in recognition of the difficulty of evaluating the true voluntariness of a prisoner’s labor, the Convention specifies that the labor in question must occur under circumstances approximating the free labor market in terms of wages (less reasonable deductions for food and housing), social benefits, and safety and health protections.⁶⁶⁰ The United States and Canada are among only a handful of nations not to have ratified Convention 29, in both cases due to concerns over restrictions placed by the Convention on the use of privately-run prisons and the hiring out of prisoners in publicly-run prisons to private businesses.⁶⁶¹

Prison labor in the United States: Forced labor of US prisoners in private facilities is a potential concern in federal supply chains. As discussed above, international law permits prison labor in government-run facilities for the public good. Work programs for US prisoners in federally-owned and operated prisons, and goods manufactured by prisoners in such facilities and procured directly by the federal government – \$320million to UNICOR/Federal Prison Industries in FY2013, mostly for uniforms and furniture – are

¹²All federal procurement data is drawn from the [Federal Procurement Data System](http://www.fedprocurement.gov). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

therefore not defined as forced labor under international law. An increasing number of US prisons and immigration detention centers are now owned and run by private entities, however, many of which operate prison labor programs. According to recent media accounts, roughly 10 percent of the US prison population, and nearly half the population of immigrant detainees, are now housed in facilities owned by for-profit private prison companies such as Corrections Corporation of America (CCA), the GEO Group, and Cornell Companies,⁶⁶² with the largest of these, CCA and the GEO Group, posting revenues of more than \$1.6 billion each in 2011.⁶⁶³ The use of prison labor in such facilities – which provide manufacturing, call centers, recycling programs, and other services to private sector clients, including many federal prime contractors⁶⁶⁴ – poses a significant risk for forced labor in federal supply chains under international law. For prisoner labor in such facilities to be deemed voluntary, they would need to approximate wage rates, safety standards, and benefits of the private marketplace. Journalists and prison watchdog organizations have noted that federal prisoners typically receive sub-market wages and fail to receive the basic workplace safety protections they are afforded by law or benefit from Social Security contributions.⁶⁶⁵

Forced prison labor overseas: The US has a record of opposition to the use of forced labor in prisons overseas, particularly in the context of US trade relations with China and other countries with troubled human rights records. Chinese use of punitive work camps, in which prisoners are made to produce goods in poor conditions and sometimes under threat of torture, has drawn criticism from US advocacy groups and politicians for more than two decades, ever since the issue came to US public attention in the early 1990s, when a letter pleading for help was smuggled into a US-bound shipment of artificial flowers by a Chinese political prisoner in a work camp.⁶⁶⁶ Chinese use of prison labor continues to be cited in discussions of Chinese human rights abuses and US-China trade, even following a 2013 announcement by the Chinese government that it was abolishing the so-called “Re-education Through Labour” system, with observers noting that many existing prisons are simply being re-named “rehabilitation” centers.⁶⁶⁷ Watchdog organizations such as the Laogai Research Foundation have helped publicize first-hand accounts by survivors of these facilities, some of whom have documented being forced to produce goods destined for US markets, in violation of US and Chinese trade agreements.⁶⁶⁸ The Department of Labor’s TVPRA List of Goods Produced by Child Labor or Forced Labor includes eleven products known to be made by trafficking victims in China, but as such accounts attest, such goods do make their way into US markets, and potentially into federal supply chains.⁶⁶⁹ Goods reportedly made with Chinese prison labor include garments, footwear, nails, toys, electronics, cotton, coal, holiday decorations, artificial flowers and umbrellas. While it is not known to what extent these products are exported, according to a report from the US-China Economic and Security Review Commission, a 2008 US diplomatic cable specifically noted that artificial flowers, holiday decorations, shoes, garments and umbrellas produced in prisons are marketed for export by middlemen.⁶⁷⁰ Construction materials, widely procured by the federal government may also be tainted by prison labor. The Laogai Research Foundation reported in 2011, a Canadian construction company imported construction materials from a factory known to use prison labor.⁶⁷¹

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Transportation and Warehousing

This sector report includes transport service workers, transport equipment manufacturing, as well as warehousing services. This report does not address the labor involved in producing the components of transport equipment. For information on the human trafficking risks associated with producing these components, see the forthcoming sector reports: [Extractives/Mining and Basic Metal Production](#) and [Electronics and Electrical Products Manufacturing](#).

This sector has the following risk factors:

- ☒ Hazardous/undesirable work
- ☒ Vulnerable, easily replaced, and/or low-skilled workforce
- ☒ Migrant workforce
- ☒ Presence of labor contractors, recruiters, agents or other middlemen in labor supply chain
- ☒ Long, complex, and/or non-transparent supply chains

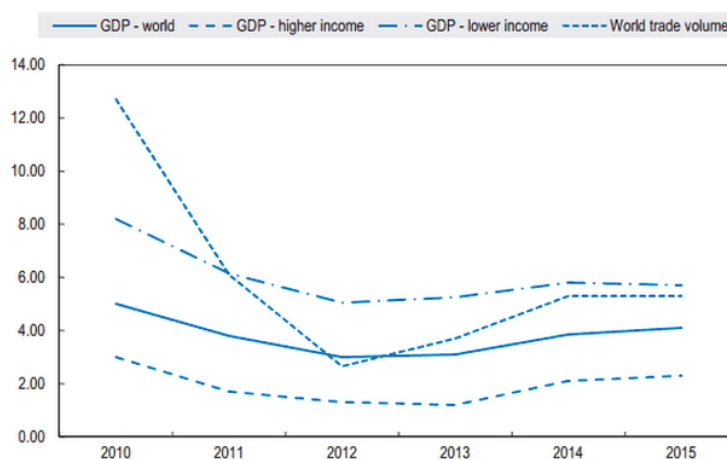
Overview of the Transportation and Warehousing Sector:

The transportation and warehousing sector includes land, air, and sea passenger and freight cargo services, warehousing of goods, as well as auto vehicle, train, ship, and aircraft manufacturing. The transportation industry also encompasses personnel employed in train and bus stations, ports, and airports.

Economy:

According to Plunkett Research, in 2013 “core transportation” revenues in the United States totaled \$950.6 billion, about six percent of economic activity. Worldwide revenues were estimated at \$4.5 trillion in 2013.⁶⁷²

Figure 1.1. GDP and trade growth, annual % change
2010–2012: observed, 2013–2015: expected



Source: OECD Economic Outlook 93, May 2013, Table 1.1; IMF World Economic Outlook, Update July 2013, Table 1; World Bank Global Economic Prospects, June 2013, Table 1.

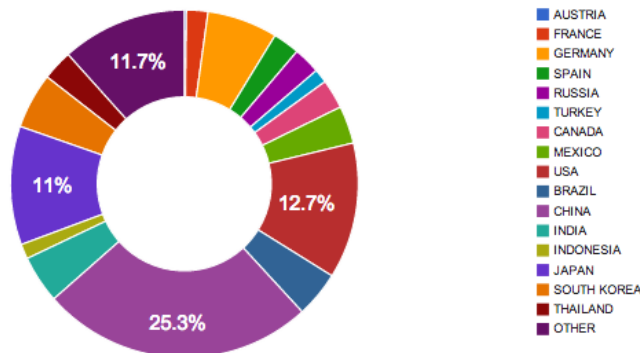
Transport sector growth depends heavily on national economic activity, including national GDP growth and global trade volumes. In the recovery from the 2008 global economic crisis, maritime freight output increased by four percent to 42.8 billion tons per mile after 2009, surpassing pre-recession volumes by 19 percent. Airfreight, while recovering in 2010, experienced 1.5 percent negative growth between 2012 and 2013 to about 180 billion tons per kilometer, mirroring weak growth in developed economies. Rail and

road freight both declined significantly after 2009 and have yet to fully recover: between 2010 and 2011, rail freight increased by three percent and road freight increased by one percent, with neither industry yet reaching pre-recession levels.⁶⁷³

Trends in auto vehicle use have altered in the past decade in both developed and emerging markets. Car use in developed markets such as France and Germany had slowed, while in the United States, United Kingdom, and Japan, growth is actually currently negative. This pattern may be explained by a combination of demographic factors such as population decline, increased urbanization, and tendencies to begin families later in life, economic factors such as higher inequality, high gasoline and other associated costs, or difficult conditions for younger generations, and policy- and technology-related factors such as competitive public transit options, decreased demand due to internet and telecommunications access.⁶⁷⁴ By contrast, in emerging markets such as Brazil, India, and China, auto vehicle use has generally grown in line with national GDP, expanding dramatically in the last decade. In 2007, emerging markets accounted for only 30 percent of global profit in the automotive industry, while in 2012 they accounted for almost 60 percent. China alone accounted for half of emerging market profits.⁶⁷⁵

Internationally, auto production is relatively diffuse over a large number of countries. China accounts for the largest portion, producing slightly over a quarter of global output; additional output from Japan, the United States, and Germany accounts for slightly more than half of total global output.⁶⁷⁶ In the United States, auto manufacturing is concentrated primarily in the mid-western and southern states of Michigan, Indiana, Ohio, Kentucky, and Alabama.⁶⁷⁷

Global Auto Manufacturing



Source: Organisation Internationale des Constructeurs d'Automobiles (OICA). "2013 Production Statistics: World Motor Vehicles Production by Country." 2013. <http://www.oica.net/category/production-statistics/>; <http://www.oica.net/wp-content/uploads/total-2013-2.pdf>

Unlike auto manufacturing, the ship and aircraft manufacturing industries are relatively concentrated geographically. The United States itself is a major exporter of aerospace aircraft and equipment, which represents an industry worth \$184.29 billion, employing about 493,600 people in early 2013.⁶⁷⁸ The United States sources the bulk of its aerospace imports from France, Canada, Japan, the United Kingdom, and Germany.⁶⁷⁹ In shipbuilding, manufacturing is dominated by China, Korea, and Japan, with China achieving top market share in the past ten years.⁶⁸⁰

Ships, automotive vehicles, and aircraft are generally composed of similar materials. Modern cars and trucks are primarily composed of low-carbon steel, high-medium strength steel, polymer and composite materials, aluminum, and other materials including magnesium and other metals.⁶⁸¹ Ships and aircraft also contain steel, aluminum, magnesium, and alloys made from these metals, as well as titanium and copper

alloys, transparent and reinforced plastic, and composite and carbon fiber materials.⁶⁸² In addition to carbon, steel alloys used in manufacturing may contain small percentages of nickel, chromium, vanadium, and molybdenum.⁶⁸³ Please see the [Extractives/Mining and Basic Metal Processing](#) sector report and individual metal commodity reports for more information on the risks associated with these metals.

Shipbreaking, often a forgotten industry in the transportation sector, is a vital part of the life cycle of the largest pieces of transportation equipment. Shipbreaking occurs mainly in India, Bangladesh, Pakistan and China. Environmental and occupational safety regulations are less strict in South Asia, which is why European ship owners tend to dispose of their ships there.⁶⁸⁴ In 2012, there were a record one thousand ships scrapped worldwide. Of these, India's shipbreaking industry scrapped 527. The shipbreaking companies pay around \$400 per ton for ships that are made of high-quality steel. Nine percent of India's demand for steel is met by recycled steel from ships.⁶⁸⁵

Workforce:

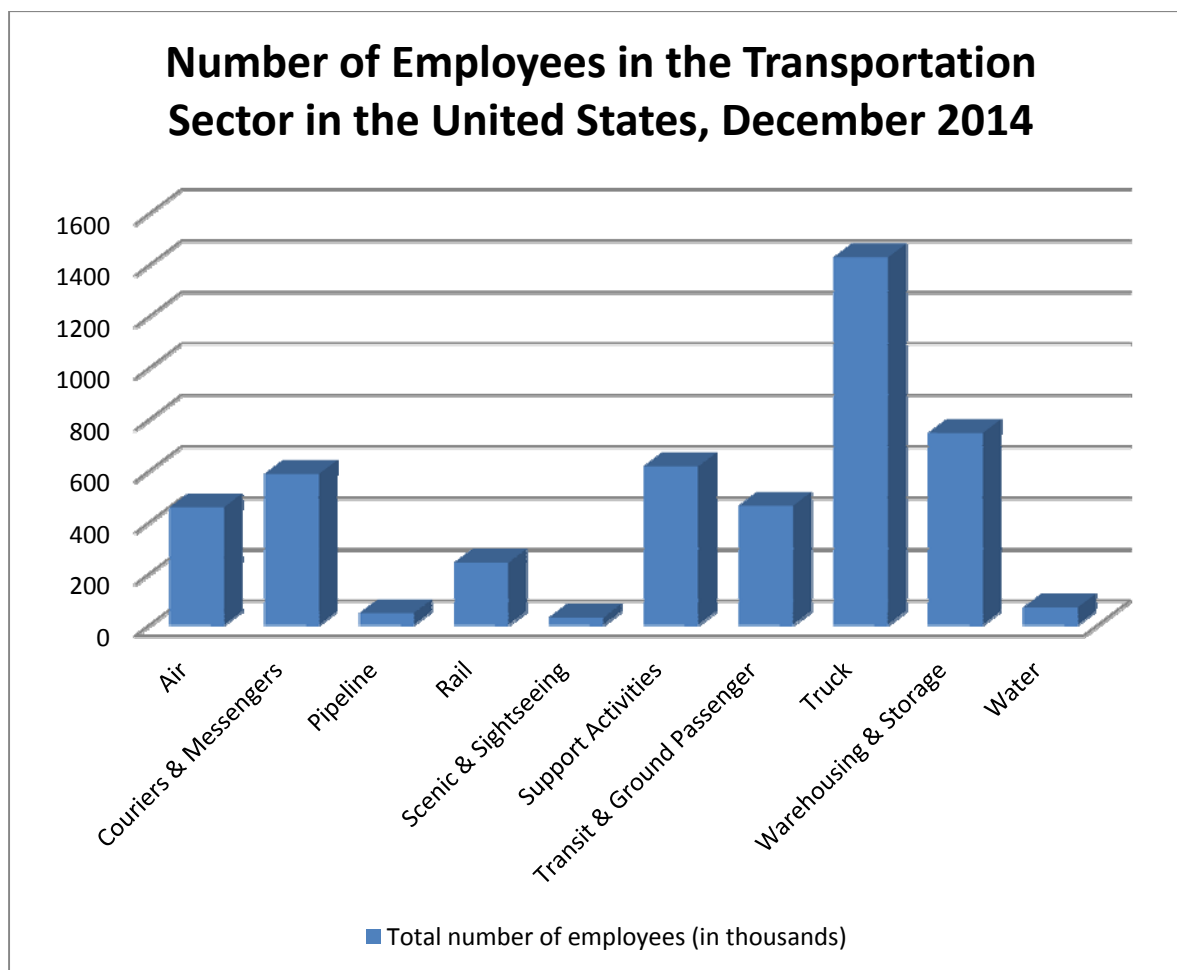
Occupations within the transportation sector encompass both manufacturing and transport service personnel.

Occupations within transportation equipment manufacturing encompass aircraft and aerospace, ship, railroad, and auto manufacturing production workers. In December 2014, there were 1,573,400 employees in transportation equipment manufacturing in the United States.¹³ By occupation, in 2013 there were 30,490 aerospace engineers, 48,730 machinists, 33,260 mechanical engineers, 248,980 team assemblers, and 49,510 welders, cutters, solderers, and brazers.⁶⁸⁶ Unionization in these industries is not uncommon, although at lower levels than for transport service providers: in 2013, an estimated 10.1 percent of United States manufacturing employees belonged to a union.⁶⁸⁷

Due to its highly technical nature, the manufacture of transportation equipment is a relatively skilled, highly-paid activity, with workers generally hired directly by employers. United States transportation manufacturing workers had average wages of over \$29/hour as of December 2014, which was significantly higher than service workers in the transportation and warehousing sector, who made an average of over \$22/hour during the same period.⁶⁸⁸ Because of the high level of wages and skilled nature of the workforce, transportation equipment manufacturers are not generally at risk for TIP, and are not a focus of this report.

Transport service workers may include bus or private drivers, train or metro conductors, aircraft or ferry pilots, freight cargo movers, station attendants, dockworkers, and supporting personnel. Generally, these occupations are generally low-skilled and do not require an advanced degree, although some workers may possess important technical training. Transportation workers have a relatively high degree of union representation by contemporary US standards: in 2013, an estimated 19.6 percent of transportation and material-moving employees were unionized in the US, higher than the 6.7 percent private sector national average.⁶⁸⁹

¹³ The United States Bureau of Labor Statistics classifies the transportation equipment manufacturing under the manufacturing sector, not under transportation.



Source: Verite, using data from the US Bureau of Labor Statistics <http://www.bls.gov/iag/tgs/iag48-49.htm>

The above graph shows the breakdown of transportation employees in the United States in December 2014. By far the most transportation employees work in truck transportation (1.4 million), which includes the following occupations: bus and truck mechanics and diesel engine specialists; first-line supervisors/managers of transportation and material-moving machine and vehicle operators; laborers and freight, stock, and material movers; heavy and tractor-trailer truck drivers; and light truck drivers or delivery services.⁶⁹⁰

As of December 2014 there were 746,600 workers employed in the warehousing and storage industry in the US. Specific warehousing jobs include industrial truck and tractor operators; laborers and freight, stock and material movers; shipping, receiving, and traffic clerks; stock clerks and order fillers; and transportation, storage, and distribution managers.⁶⁹¹

Other subsets of the transportation and warehousing sector include support activities for transportation, such as aircraft mechanics and service technicians; cargo and freight agents; dispatchers; and freight, stock, and material movers; employment within the industry was 617,000 in December 2014.⁶⁹² The couriers and messengers subsector employs an additional 587,300 workers in the United States,⁶⁹³ while employment within the United States air transportation subsector, including pilots, flight attendants, and ticket agents, was 457,800.⁶⁹⁴ Employment in the transit and ground passenger transportation subsector was 463,300 workers in the United States.⁶⁹⁵ The majority of these jobs are nonsupervisory positions.⁶⁹⁶

Risks to Human Trafficking in this Sector:

The United States Department of State 2014 Trafficking in Persons Report noted clear evidence of human trafficking in the transportation sector in the following countries: Cameroon, Finland, and Qatar.⁶⁹⁷ This is almost certainly an incomplete list.

Hazardous/Undesirable Work:

Drivers and other operators of transportation equipment experience long hours and are often required to work overnight. These workers are also at risk of being in transportation accidents. Operators and warehouse employees often have to lift and carry heavy objects and are therefore at risk of injury. According to the United States Department of Labor's Bureau of Labor Statistics, hand laborers and freight, stock, and material movers are among the occupations with the highest rates of injury and illness. Twelve percent of all workplace deaths in the US involve truckers.⁶⁹⁸ Mechanics, and in some instances operators, are might be exposed to harmful chemicals and dangerous machinery.⁶⁹⁹

According to OSHA, the fatal injury rate for workers in warehouses is higher than the national average for workers in all industries. Potential hazards include injuries from forklifts and other heavy machinery, being crushed by falling materials, falling off docks, injury from conveyor belts, repetitive lifting of heavy loads, chemical exposure, and fires and explosions.⁷⁰⁰ Warehouses can be extremely hot and employers often pressure workers to perform at high speeds. Investigations into working conditions of outsourced warehouse workers have found that workers in warehouses often face underpayment of wages and lack of pay for overtime.⁷⁰¹

Seafaring transport workers face particular vulnerabilities. Workers are often at sea for long periods of time, with no opportunity to leave. On vessels, workers face conditions similar to those facing fishing workers: poor weather conditions, a constantly moving work environment, and distance from medical care. Workers can be crushed by heavy cargo or machinery, or caught or entangled in mooring lines. While on vessels, transport workers are exposed to sun and salt water without protective clothing, slippery/moving work surfaces, hazardous chemicals, strong vibrations from the ship's engines, large waves, inadequate sleeping quarters, inadequate sanitation, and a lack of fresh food and water. In the event that someone becomes ill while on board a vessel, it can be difficult to seek medical care in a timely manner. Navigation failures leading to collisions or shipwrecks are also a risk.⁷⁰² Many vessels are old and in poor repair.⁷⁰³

The ship breaking industry in India, Bangladesh, and Pakistan has raised particular concern surrounding environmental hazards and worker safety since the 1990s. In 2004, the ILO issued a report on ship breaking, hoping to formalize this predominantly informal industry. It voiced many causes for concern: 20-30 year-old ships containing heavy metals, asbestos, PCBs, and other toxic chemicals; workers unprotected by labor law; "casual, contract, or migrant" laborers; lack of access to proper waste disposal; and the alarming frequency of worker injuries and fatalities, among others.⁷⁰⁴ In 2010, a World Bank report concluded that there existed "widespread varying contamination" in ship breaking yards in Chittagong, Bangladesh, and "less contamination" in Gadani, Pakistan, both of which violated the 2009 Hong Kong Convention on ship recycling.⁷⁰⁵ Workers wear no protective equipment and often no shoes, leaving them vulnerable to toxic waste in oil, paint, and cargo material. Local Bangladeshi nonprofits claim that in Chittagong, on average, a worker is injured daily and one worker dies per week.⁷⁰⁶ In the year 2011 alone, at least 20 shipyard workers died and 150 were injured in Pakistan.⁷⁰⁷

Although there are no other indicators of human trafficking among airline pilots and staff, the International Transport Workers Federation reports extremely high levels of overtime, leading to safety concerns.⁷⁰⁸

Vulnerable, Easily Replaced, and/or Low-Skilled Workforce:

Because of the commonsensical association of transportation work with movement of goods and people, it may seem that transportation workers enjoy an inherent measure of control over their own freedom of movement, and hence are not as vulnerable to trafficking as workers in some other sectors. This may be true for some drivers, although, as noted above, the sector encompasses many other kinds of labor other than driving. Even for drivers, however, the economic conditions in which they labor may exacerbate their vulnerability to exploitation and abuse by employers, including trafficking.

Transportation and goods-delivery is characterized by part-time, low paid work. The transport sector in the United States was deregulated in the 1980s; since then, real wages for truckers have fallen 30 percent.⁷⁰⁹ The pressure that large retailers exert on their suppliers to provide goods at extremely low price points creates downward pressure on transport workers across all levels of the industry.

Transport workers such as truck drivers are also often misclassified as independent contractors. Workers misclassified as independent contractors are vulnerable to forced overtime, they lack access to grievance mechanisms, have few legal protections, and are therefore more vulnerable to exploitation. This classification exempts them from protections including the Fair Labor Standards Act and allows their employers – generally third party logistics suppliers (see below) – to make improper wage deductions. In southern California, hundreds of truck drivers recently filed legal cases alleging that because they were misclassified as independent contractors rather than employees, they did not receive overtime wages and other protections guaranteed to employees.⁷¹⁰ Truck drivers are often required to pay for costs of truck maintenance, gas and tires, as well as any collision costs, even when they do not own the trucks they drive. These deductions can cause truck drivers to earn well below the minimum wage.⁷¹¹

Reflecting low levels of regulation in many countries, children are often exploited in more informal forms of transportation work. In Nepal, for example, approximately one percent of boy laborers are employed in the transportation sector, primarily in Kathmandu, where they work as touts on informal public transport vehicles, ferrying loads with rickshaws or bicycles, and other forms of labor.⁷¹² In 2012, World Education surveyed child transport workers in Kathmandu to determine sources and potential solutions to this problem. It found that while in some cases child transport workers had taken work due to family indebtedness, food insecurity was much more common: nearly two-thirds of child transport workers reported that their households did not have enough food during the year. Poverty in Nepal has led to difficulties in tracking and eradicating child labor: nearly one third of child transport workers had never had their birth registered with the government, and over half of child transport workers reported having migrated from a different district. Child labor is more likely to be used on small vehicles going short distances, rather than on larger vehicles traveling longer distances, where law enforcement officials and employers have been more aware of the problem.⁷¹³ In Kenya, children are similarly engaged in informal transportation, where they carry heavy loads and are exposed to traffic accidents.⁷¹⁴ In Cameroon, children operate commercial motorcycles, often without licenses.⁷¹⁵

The rights of seafaring transport workers can be particularly difficult to safeguard. Outside of a nation's "exclusive economic zone" (the 200 mile strip of ocean adjacent to the shoreline), vessels are generally governed by the laws of the country in which they are registered, or their "flag state." Under the practice known as "flags of convenience," shipping vessels may be registered in countries with no meaningful link to their operations, including in countries with severely limited interest or capacity to enforce labor-related laws on vessels flying their flag.⁷¹⁶ Under this practice, shipping transport workers are particularly vulnerable to abuse, abandonment, and trafficking. Workers on abandoned ships may be left without food, water, fuel or pay by boat owners. If an abandoned vessel tries to dock at a foreign port to seek assistance, the workers may be denied entry or be forcibly repatriated without access to redress to seek months or years of unpaid wages. Workers are also vulnerable to arrest and detention by foreign nations if vessels

are in maritime waters without proper legal authorization – a situation over which workers themselves typically have no control.⁷¹⁷

Workers in the shipbreaking sector in Bangladesh are highly vulnerable. Most workers are young, and half are estimated to be illiterate. Child labor is rampant. The shipbreaking industry in Bangladesh is centered north of Chittagong, where families have very few other livelihood alternatives. Workers and their families do not receive compensation for injuries or death.⁷¹⁸ Shipbreaking work is unskilled and workers receive little training. For this reason, workers have little leverage against their employers, and are easily replaced.

Migrant Workforce:

In the US, Latino workers are overrepresented in temporary and contingent work forces employed by staffing agencies that supply outsourced workers in transportation and warehouse sectors.⁷¹⁹ Immigrant workers in the US enter the production, transportation, and material moving sectors in higher numbers than native-born workers (15.4 percent to 11.1 percent).⁷²⁰ Immigrant workers are also more likely to be employed as hand packers and packagers than native-born workers: 17 percent of immigrants in the sector are in packaging compared to only five percent of native-born workers.⁷²¹ According to the Teamster Port Division, most of the immigrant drivers in Oakland, California are East Indian, drivers in Los Angeles are generally from Central America and Mexico, and the immigrant drivers in Miami are often Cuban.⁷²²

The transportation sector of the European Union also employs a large proportion of immigrant labor. The European Agency for Safety and Health at Work reported that immigrant transport labor is more likely to be employed in unsanitary, dangerous, and demanding work, characterized by uncertainty, poor working conditions, part time employment, and low wages. In the transport sector, immigrants may find employment performing long-distance trucking, baggage handling in airports, and low-skilled rail and ship service work.⁷²³ In the United Kingdom, the proportion of immigrants entering precarious, low-wage positions has also increased, from 8.5 percent in 2002 to 25.3 percent in 2012.⁷²⁴

Presence of Labor Contractors, Recruiters, Agents or Other Middlemen in Labor Supply Chain:

Large corporations and retailers are increasingly outsourcing warehousing, transportation and delivery operations to logistics management companies, as these functions are not considered “core competencies.”⁷²⁵ These third-party logistics firms work with shippers to manage the logistics of their operations, including warehousing and transportation management.⁷²⁶ The logistics management companies generally further sub-contract labor supply to employment agencies or use independent contractors.⁷²⁷ Although the retailer or company may set the terms of working conditions through managers on site, there is no direct relationship between the worker at the bottom of the chain and the company – creating vulnerability for exploitation. Transportation workers employed by outsourced logistics firms report higher rates of core labor violations than those employed by direct arrangements, with Latinos being disproportionately outsourced compared to workers of other ethnicities.⁷²⁸

The system of logistics outsourcing and subsequent labor sub-contracting has created a particular vulnerability for warehouse workers. Warehouse workers move goods from shipping containers into warehouses, and load trucks with goods for delivery to retail stores.⁷²⁹ In the massive warehouse complexes surrounding the southern California Ports of Los Angeles and Long Beach, where many Chinese goods enter the United States market for distribution to retailers, most workers are employed by temporary employment agencies even if they have worked in a warehouse for years, and are therefore not eligible for benefits, making only minimum wage.⁷³⁰ The National Employment Law Project has documented that sub-contracted workers such as these routinely face low wages, labor violations and fraudulent pay practices.⁷³¹ In some cases, warehouse workers in the US are hired through agents of intermediaries known as “raiteros,” who charge workers for transport from their housing to work, deducting fees from worker pay checks.⁷³² Although ostensibly only providing transportation for a

population of vulnerable, predominantly migrant workers, these raiteros also distribute pay checks and determine which workers have work on any given day.⁷³³

The majority of seafaring transport workers are also hired through labor brokers or employment agencies.⁷³⁴ Jobs in this sector are often seen as desirable and a step into the formal economy for workers in developing countries. This encourages the practice of paying bribes or fees to secure jobs, leaving workers indebted to their recruiters. Workers may work without contracts, or even without pay, for up to several years for the employment agency itself, in an effort to secure a job. Salaries are often much lower than promised, and it is common for recruitment agencies to take deductions from wages. Because recruitment agencies dominate hiring in the sector, workers are often fearful of reporting grievances, for fear of being blacklisted.⁷³⁵

In the Gulf States, low- and semi-skilled workers are subjected to human trafficking in the transportation and dock-working industries among other sectors.⁷³⁶ These workers, primarily migrants from the Philippines, Bangladesh, Sri Lanka and Nepal, are recruited via employment agencies and must pay fees to acquire their jobs, for which they take out burdensome loans. Upon arrival in the host country, they are paid less than promised, leaving them indebted.⁷³⁷ Identity documents are commonly withheld, and workers are tied to their employers on the terms of their visa.

Migrant workers recruited by labor agents are used in docks in wealthy countries such as Singapore, which handles one-sixth of the world's cargo.⁷³⁸ Workers from Thailand, Bangladesh, China, Malaysia, Indonesia, the Philippines and Burma load and unload cargo and repair ships and containers.⁷³⁹ Singapore has no minimum wage for migrant workers, and many arrive indebted to labor recruiters.⁷⁴⁰

Federal Procurement in the Transportation and Warehousing Sector:¹⁴

Transportation of both passengers and things is procured by virtually all federal agencies, with agencies responsible for facilitating or carrying out complex logistical operations being the largest spenders. Unsurprisingly, spending is led by USTRANSCOM. Other significant procurers of transportation include the Departments of the Army, Navy, and Air Force, USAID, FAS, and the State Department. Transportation is often also bundled into large logistics management and support contracts, particularly overseas (see the [Federal Procurement of Large Logistics Management Contracts](#) pullout box for more information).

In FY2013, the US Government spent approximately \$4.73 billion on passenger travel (PSC V21% and V22%, excluding V227, V228), mostly in contracts greater than \$10 million for charter air service, but with many contracts for far smaller amounts and other modes of travel as well.

Positive direct federal expenditure on transportation of things in FY2013 amounted to \$5.30 billion (PSC V1%), not including the launching of guided missiles and space vehicles. Of this, \$3.42 billion was spent overseas, almost all of which (\$3.13 billion) was spent in contracts greater than or equal to \$500,000, requiring compliance scrutiny under the Executive Order.

The US spent \$203 million in direct expenditures on warehousing in FY2013.

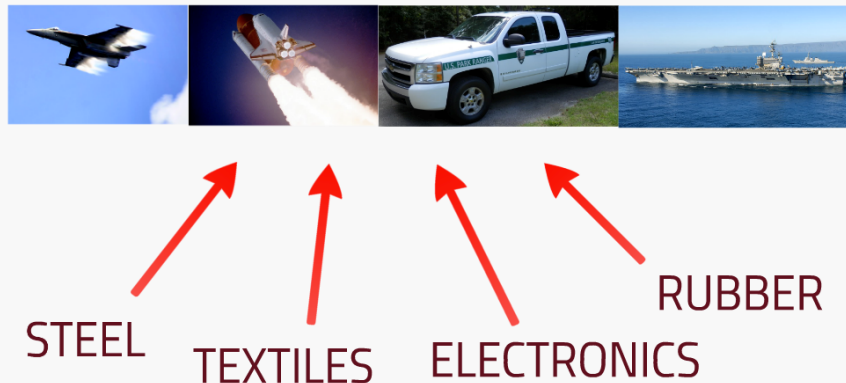
¹⁴ All federal procurement data is drawn from the Federal Procurement Data System (<https://www.fpds.gov/>). Because there is no seamless interface between the economic sectors discussed in this report and the way the Federal Government tracks categories of contract spending, many numbers presented in this analysis are derived from composites. PSC codes and or NAICS numbers have been provided for relevant search categories.

Procurement of Transportation Equipment:*

Procurement of transportation equipment represents perhaps the single most significant component of the United States federal spend. As noted above, the skilled the manufacturing workers who produce finished transportation equipment are not generally at risk for human trafficking, but the electronics (see the [Electronics and Electrical Products Manufacturing](#) sector report), metals (see the [Extractives/Mining and Basic Metal Production](#) sector report) and other raw materials inputs that go into the making of such products raise many trafficking concerns for United States supply chains.

Transport Equipment:

Transport Vehicles (air, space, land, sea):
USD 78.14 billion (FY 2013)



In FY2013, the United States Government spent approximately \$78.14 billion on aircraft, space vehicles, ships, trains, trucks, cars, associated components, and launching/ground handling equipment. The largest purchases in this category were made by defense agencies like the Navy, Army, and Air Force, with a dozen contracts in excess of a billion dollars granted by these agencies in FY2013.

Contracts related to the purchase of aircraft and ships accounted for the bulk of new federal spending in this category (\$63.42 billion). Other significant transportation equipment purchases in FY2013 included space vehicles (\$2.97 billion), tanks (\$1.26 billion), and wheeled combat/assault/tactical vehicles (\$1.64 billion).

Light trucks and passenger cars are procured by a wide range of federal agencies, amounting to \$1.24 billion in FY2013. Most car purchases are made through the General Services Administration's Federal Acquisition Service, which sources cars from US-based commercial car dealerships. The FAS bought \$1.03 billion in passenger vehicles in FY2013.

Overseas procurement of transportation equipment was a relatively small component of total spending in this category, at \$1.44 billion (<2 percent of total spending on transportation equipment) in FY2013. \$1.25 billion of this overseas spending was on contracts greater than \$500,000, making them subject to compliance scrutiny under the EO. As with domestic spending in this sector, large overseas contracts were dominated by purchases of aircraft and other heavy military equipment. Many smaller overseas contracts were for passenger cars and engine parts.

* Figures for procurement of transportation equipment were compiled using the following PSC codes: Aircraft, Space Vehicles, Ships, Trains, Motor Vehicles, Associated Components, and Launching/Ground Handling Equipment = composite of PSC codes 15%-20%, 22%, 23%, 25%, 26%, and 28% -31%); Space Vehicles = PSC 1810; Tanks = PSC 2350; Wheeled Combat/Assault/Tactical Vehicles = PSC 2355; Light trucks and passenger cars = PSC 2310.

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Analyses of the following commodities are forthcoming:

- Aluminum
- Bamboo
- Bananas
- Beans (green, soy, yellow) and Pulses (legumes)
- Brass
- Bricks
- Cattle
- Charcoal
- Citrus
- Coal
- Cocoa
- Coffee
- Coltan, Tungsten & Tin
- Copper
- Corn
- Cotton
- Diamonds
- Fish
- Flowers
- Gold
- Granite and Other Stone
- Gravel and Crushed Stone
- Jewels
- Lead
- Leather
- Meat Processing
- Melons
- Nuts
- Palm Oil
- Pineapple
- Rare Earth Metals (REMs)
- Rice
- Rubber
- Salt
- Shrimp
- Silk
- Silver
- Steel
- Strawberries
- Sugar
- Sunflowers
- Tea
- Titanium
- Tobacco
- Tomatoes
- Wheat
- Wool
- Zinc

